

A dark blue background with a complex, glowing circuit board pattern in lighter blue and white. The pattern consists of various lines, nodes, and circular elements, creating a sense of digital connectivity and technology.

MyMMiC Thin Film Filter

1- BandPass Thin Film Filter catalog

Model	I. L. @f ₀ (dB)	BW _{1dB} (GHz)	Attenuation (dB)	Size(mm)	Page
BMBP2R3/R6-6DC	1.5	2.0-2.6	≥40dB@1.4&2.92GHz	5.5×7.5×0.39	9
BMBP2R3/1-8DC	1.5	1.8-2.8	≥40dB@1.0&3.35GHz	6.5×8.5×0.39	10
BMBP2R5/R3-6DC	2.5	2.35-2.65	≥40dB@1.92&2.9GHz	7×8.5×0.39	11
BMBP2R5/1-8DC	2.0	2.0-3.0	≥40dB@1.2&3.6GHz	7×8.5×0.39	12
BMBP2R7/R2-4DC	3.5	2.6-2.8	≥40dB@2.2&3.5GHz	5.5×5.0×0.26	13
BMBP2R75/R2-4DC	3.5	2.65-2.85	≥40dB@2.3&3.6GHz	5.5×5.0×0.26	14
BMBP2R75/R3-6DC	2.5	2.6-2.9	≥40dB@1.7&3.2GHz	8.5×7.8×0.39	15
BMBP2R75/1R3-7DC	2.0	2.1-3.4	≥40dB@1.25&4GHz	6×7.8×0.39	16
BMBP2R8/R2-4DC	3.5	2.75-2.95	≥40dB@2.35&3.7GHz	5.5×5.0×0.26	17
BMBP3/1-10DC	2.5	2.5-3.5	≥40dB@1.9&4.15GHz	8×7.8×0.39	18
BMBP3R1/R8-4DA	1.0	2.7-3.5	≥40dB@0.4&4.5GHz	6.15×6.15×0.39	19
BMBP3R15/1R2-6DC	1.5	2.55-3.75	≥40dB@1.3&4.4GHz	5.5×6.7×0.39	20
BMBP3R18/R1-5FA	5.5	3.13-3.23	≥40dB@2.95&3.4GHz	8×9×0.26	21
BMBP3R5/1R2-9DC	2.0	2.9-4.1	≥40dB@2.2&4.75GHz	8×6.6×0.39	22
BMBP3R59/R02-5FA	6.5	3.58-3.60	≥40dB@3.35&3.8GHz	8×8×0.26	23
BMBP3R78/R04-5FA	6.5	3.76-3.80	≥40dB@3.55&4.0GHz	8×7.7×0.26	24
BMBP4/R6-6YC	2.0	3.7-4.3	≥40dB@3.15&4.8GHz	8×6.6×0.39	25
BMBP4/4R4-5QA	1.5	1.8-6.2	≥25dB@0.2 GHz ≥30dB@7.45GHz	12.0×5.0×0.26	26
BMBP4R05/R5-6YC	2.0	3.8-4.3	≥40dB@3.2&4.6GHz	8×6.6×0.39	27
BMBP4R05/1R3-9DC	2.0	3.4-4.7	≥40dB@2.65&5.3GHz	8×6×0.39	28
BMBP4R1/1R3-9DC	2.0	3.45-4.75	≥40dB@2.8&5.25GHz	8×6×0.39	29
BMBP4R4/1R7-8DA	1.5	3.55-5.25	≥40dB@2.2&6.2GHz	9×7.7×0.39	30

BMBP4R5/1R2-9DC	2.0	3.9-5.1	≥40dB@3.2&5.8GHz	8×5.2×0.39	31
BMBP4R55/R7-6YC	2.0	4.2-4.9	≥40dB@3.7&5.3GHz	8×5.7×0.39	32
BMBP4R72/R56-6YC	2.0	4.44-5.0	≥40dB@3.95&5.45GHz	8.5×6×0.39	33
BMBP4R79/R02-5FA	6.5	4.78-4.80	≥40dB@4.5&5.05GHz	8×6.3×0.26	34
BMBP4R95/R7-6YC	2.0	4.6-5.3	≥40dB@4.15&5.75GHz	8×5.5×0.39	35
BMBP4R95/2R1-7DC	1.5	3.9-6	≥40dB@2.6&7.1GHz	6×4.8×0.39	36
BMBP5/1R2-8DC	2.0	4.45-5.65	≥40dB@3.7&6.2GHz	8×5.3×0.39	37
BMBP5R1/R8-6YC	2.0	4.7-5.5	≥40dB@4.2&6.05GHz	8×5.5×0.39	38
BMBP5R1/2R2-9DA	2.0	4-6.2	≥40dB@3.0&7.1GHz	8×7.3×0.39	39
BMBP5R15/1R7-8DC	1.5	4.3-6.0	≥40dB@3.3&6.7GHz	8×5.3×0.39	40
BMBP5R2/R1-4EA	4.0	5.15-5.25	≥40dB@4.75&5.55GHz	6×6.5×0.26	41
BMBP5R35/3R1-8DA	1.3	3.8-6.9	≥40dB@2.0&7.85GHz	6×6.5×0.39	42
BMBP5R35/1R7-8DA	1.5	4.5-6.2	≥40dB@3.0&7.5GHz	9×6.4×0.39	43
BMBP5R45/R7-4DC	1.5	5.1-5.8	≥40dB@3.2&6.4GHz	4×4×0.39	44
BMBP5R5/R6-6YC	2.0	5.2-5.8	≥40dB@4.6&6.3GHz	8.5×5.4×0.39	45
BMBP5R5/R7-4DC	1.5	5.15-5.85	≥40dB@3.3&6.4GHz	4×4×0.39	46
BMBP5R5/1R2-8DC	2.0	4.9-6.1	≥40dB@4.0&6.8GHz	8×4.4×0.39	47
BMBP5R52/R56-6YA	2.5	5.28-5.8	≥40dB@4.8&6.3GHz	7×7.5×0.26	48
BMBP6R1/R4-6YA	3.0	5.9-6.3	≥40dB@5.4&6.8GHz	7×6.9×0.26	49
BMBP6R25/R7-6YA	2.5	5.92-6.6	≥40dB@5.3&7.15GHz	7×6.7×0.26	50
BMBP6R3/1-6DA	2.0	5.8-6.8	≥40dB@4.4&7.6GHz	6×5.5×0.26	51
BMBP6R3/1R8-8DA	1.5	5.5-7.1	≥40dB@4.3&8.2GHz	9×5.3×0.26	52
BMBP6R37/R26-5FA	3.5	6.24-6.5	≥40dB@5.8&6.95GHz	8×6×0.26	53
BMBP6R4/R4-5FC	2.5	6.2-6.6	≥40dB@5.7&7.1GHz	5.5×3.5×0.39	54
BMBP6R49/R34-5FA	3.5	6.32-6.6	≥40dB@5.9&7.1GHz	6.5×4.8×0.26	55
BMBP6R5/R1-4EA	4.5	6.45-6.55	≥40dB@6.05&6.9GHz	6×5.5×0.26	56
BMBP6R5/1R2-11DA	2.5	5.9-7.1	≥40dB@5.2&8.1GHz	8.5×5.2×0.26	57
BMBP6R5/3R6-8DA	1.5	4.7-8.1	≥40dB@2.9&9.55GHz	6×6×0.39	58
BMBP6R72/R7-6YA	2.5	6.37-7.07	≥40dB@5.6&7.65GHz	6.5×6.5×0.26	59
BMBP6R81/2-10DA	2.5	5.83-7.8	≥40dB@4.8&8.9GHz	8×5.4×0.26	60

BMBP6R9/2R2-10DA	2.0	5.8-8.0	≥40dB@4.8&9.0GHz	8×5.4×0.26	61
BMBP6R95/2R3-9DA	1.5	5.8-8.1	≥40dB@4.6&9.2GHz	7×4.9×0.26	62
BMBP7/1R3-6DA	2.0	6.3-7.6	≥40dB@4.8&8.6GHz	6×5.1×0.26	63
BMBP7/2-7DA	2.0	6-8	≥40dB@4.6&9.2GHz	6×5×0.26	64
BMBP7/R32-6YA	3.0	6.82-7.14	≥40dB@6.35&7.65GHz	8×6.3×0.26	65
BMBP7R15/R4-6YA	3.0	6.95-7.35	≥40dB@6.45&7.9GHz	7.5×6.2×0.26	66
BMBP7R3/1R6-10DA	2.5	6.5-8.1	≥40dB@5.5&9.1GHz	9×5×0.26	67
BMBP7R35/R3-6YA	3.0	7.2-7.5	≥40dB@6.6&8.0GHz	7.5×6×0.26	68
BMBP7R5/1R4-9DA	2.0	6.8-8.2	≥40dB@5.7&9.05GHz	7×4.8×0.26	69
BMBP7R9/R2-5FA	3.5	7.83-8	≥40dB@7.3&8.5GHz	6.5×4×0.26	70
BMBP8/R8-8YA	3.0	7.6-8.4	≥40dB@7.15&9.15GHz	8.5×6×0.26	71
BMBP8/4-10DA	1.5	6-10	≥40dB@4.0&11.5GHz	7×4.9×0.39	72
BMBP8/4R2-9DA	1.5	5.9-10.1	≥40dB@4&11.75GHz	7×4.6×0.39	73
BMBP8R3/R8-8YA	3.0	7.9-8.6	≥40dB@7.35&9.4GHz	8.5×6×0.26	74
BMBP8R3/1-7DA	2.5	7.8-8.8	≥40dB@6.8&9.6GHz	7×4.5×0.26	75
BMBP8R45/1R3-8YA	2.5	7.8-9.1	≥40dB@7.1&10.0GHz	8×5.5×0.26	76
BMBP8R45/2R2-8DA	2.0	7.4-9.5	≥40dB@5.85&10.65GHz	6×4.6×0.26	77
BMBP8R5/1R6-7DA	2.5	7.7-9.3	≥40dB@6.0&10.5GHz	6×4.6×0.26	78
BMBP8R55/R9-8YA	3.5	8.1-8.9	≥40dB@7.6&9.65GHz	8.5×6×0.26	79
BMBP8R57/R2-6FA	6.0	8.47-8.67	≥40dB@8.2&8.95GHz	7.5×4.0×0.26	80
BMBP8R65/R4-6YA	4	8.45-8.85	≥40dB@7.95&9.3GHz	9×5.5×0.26	81
BMBP8R7/R7-6YA	2.5	8.35-9.05	≥40dB@7.7&9.65GHz	7×5.5×0.26	82
BMBP8R825/R95-8YA	3.0	8.35-9.2	≥40dB@7.85&10.0GHz	8.5×6×0.26	83
BMBP8R95/2R3-9DA	1.5	7.8-10.1	≥40dB@6.5&11.2GHz	7×4×0.26	84
BMBP9/2-7DA	1.5	8-10	≥40dB@6.4&11.3GHz	6×4.2×0.26	85
BMBP9R025/R85-8YA	3.5	8.6-9.4	≥40dB@8.1&10.2GHz	8.5×5.5×0.26	86
BMBP9R1/6R8-5QA	1.5	5.7-12.5	≥30dB@2.0&15.5GHz	7.5×4.5×0.26	87
BMBP9R3/R8-8YA	3.0	8.9-9.7	≥40dB@8.4&10.45GHz	8.5×5.5×0.26	88
BMBP9R4/1R8-7DA	2.0	8.5-10.3	≥40dB@6.9&11.7GHz	6×4.2×0.26	89
BMBP9R45/1R3-8YA	2.5	8.8-10.1	≥40dB@8.1&11.0GHz	8×5.2×0.26	90

BMBP9R45/1R6-7DA	2.5	8.7-10.2	≥40dB@7.3&11.3GHz	6×4.2×0.26	91
BMBP9R5/1R2-7DA	2.5	8.9-10.1	≥40dB@7.7&11GHz	7×4×0.26	92
BMBP9R6/R8-8YA	3.5	9.2-9.95	≥40dB@8.6&10.7GHz	9×5.5×0.26	93
BMBP9R8/R8-8YA	3.5	9.4-10.1	≥40dB@8.8&10.95GHz	9×5.5×0.26	94
BMBP9R9/1R2-7DA	2.0	9.3-10.5	≥40dB@8.0&11.4GHz	7×3.8×0.26	95
BMBP9R9/1R3-7DA	2.5	9.25-10.55	≥40dB@8.0&11.4GHz	7×3.8×0.26	96
BMBP9R95/R8-6YA	3.5	9.55-10.35	≥40dB@8.9&11GHz	8×4.8×0.26	97
BMBP9R95/3R3-8DA	1.5	8.3-11.6	≥40dB@6.4&13.2GHz	6×4.2×0.26	98
BMBP10/R8-6YA	2.5	9.6-10.4	≥40dB@8.8&11.05GHz	8×4.8×0.26	99
BMBP10/R7-8YA	3.5	9.65-10.35	≥40dB@9.0&11.2GHz	8.5×5.5×0.26	100
BMBP10R05/3R1-8DA	1.5	8.5-11.4	≥40dB@6.65&13.0GHz	6×4.2×0.26	101
BMBP10R05/4R2-10DA	1.5	7.95-12.15	≥40dB@6.4&13.6GHz	8×4×0.39	102
BMBP10R15/1R7-7DA	2.0	9.3-11	≥40dB@8.0&12.0GHz	7×3.9×0.26	103
BMBP10R2/R7-8YA	3.5	9.85-10.55	≥40dB@9.25&11.45GHz	8.5×5.5×0.26	104
BMBP10R2/5-9DA	1.5	7.7-12.7	≥40dB@5.6&14.8GHz	7×4×0.39	105
BMBP10R25/5R7-8DA	1.3	7.4-13.1	≥40dB@5&15.1GHz	6×4.5×0.39	106
BMBP10R3/R8-7DA	2.5	9.9-10.7	≥40dB@8.5&12.0GHz	7×4×0.26	107
BMBP10R4/1R2-8YA	2.5	9.8-11.0	≥40dB@8.9&12.1GHz	8×5×0.26	108
BMBP10R5/R9-8YA	3.5	10.1-10.8	≥40dB@9.4&11.8GHz	9×5.5×0.26	109
BMBP10R6/2R2-8DA	2.5	9.5-11.6	≥40dB@8.2&12.75GHz	7×4.0×0.26	110
BMBP10R65/1R7-8DA	2.5	9.8-11.5	≥40dB@8.6&12.3GHz	7×4×0.26	111
BMBP10R8/1-8YA	3.5	10.35-11.25	≥40dB@9.7&12GHz	9×5.5×0.26	112
BMBP10R9/2R4-10DA	2.0	9.7-12.1	≥40dB@8.4&13.25GHz	7×3.6×0.26	113
BMBP10R95/1R4-7SA	2.5	10.25-11.65	≥40dB@9.4&12.65GHz	7×3.7×0.26	114
BMBP11/2-7DA	1.5	10-12	≥40dB@8.0&13.4GHz	6×3.8×0.26	115
BMBP11R025/R95-8YA	3.0	10.55-11.5	≥40dB@9.9&12.3GHz	9×5.5×0.26	116
BMBP 11R3/1-8YA	3.5	10.85-11.75	≥40dB@10.2&12.5GHz	9×5.5×0.26	117
BMBP11R3/1R2-8YA	3.0	10.7-11.9	≥40dB@9.9&12.9GHz	8×4.7×0.26	118
BMBP11R45/1R2-7DA	2.5	10.85-12.05	≥40dB@9.5&12.85GHz	7×3.5×0.26	119
BMBP11R525/R85-8YA	3.5	11.1-11.8	≥40dB@10.4&12.75GHz	9×5×0.26	120

BMBP11R85/1R1-8YA	3.5	11.3-12.4	≥40dB@10.7&13.0GHz	9×5×0.26	121
BMBP12/2R2-7SA	2.5	10.9-13.1	≥40dB@9.7&14.3GHz	7×3.6×0.26	122
BMBP12/12-5QA	1.5	6.0-18.0	≥30dB@0.6&20.3GHz	6×3.9×0.26	123
BMBP12R1/1R6-7SA	3.0	11.3-12.9	≥40dB@10.1&13.8GHz	7×3.6×0.26	124
BMBP12R15/1R1-7DA	2.5	11.6-12.7	≥40dB@10.35&13.75GHz	8×3.4×0.26	125
BMBP12R15/4R3-9DA	2.0	10-14	≥40dB@8.2&15.6GHz	8×3.5×0.39	126
BMBP12R2/1-7SA	3.0	11.7-12.7	≥40dB@10.9&13.5GHz	7×3.4×0.26	127
BMBP12R4/4R4-10DA	2.0	10.2-14.6	≥40dB@8.0&16.0GHz	7×3.4×0.26	128
BMBP12R45/4R1-10DA	2.0	10.4-14.3	≥40dB@8.6&15.85GHz	7×3.4×0.26	129
BMBP12R5/R4-6YA	4.0	12.3-12.7	≥40dB@11.7&13.2GHz	9×4.9×0.26	130
BMBP 12R5/1R2-7DA	3.5	11.9-13.1	≥40dB@10.6&14.0GHz	8×3.5×0.26	131
BMBP12R65/1R7-8DA	2.5	11.8-13.5	≥40dB@10.3&15.0GHz	7×3.3×0.26	132
BMBP12R75/R3-6YA	4.5	12.6-12.9	≥40dB@11.95&13.4GHz	8×4.5×0.26	133
BMBP13/1R8-9UA	3.5	12.1-13.9	≥40dB@11.2&15.2Hz	8×3.5×0.26	134
BMBP13R05/R6-6YA	3.5	12.75-13.35	≥40dB@12.0&13.95GHz	8.5×4.5×0.26	135
BMBP13R1/2-9UA	3.5	12.2-14.1	≥40dB@10.8&15.7GHz	8×3.5×0.26	136
BMBP13R2/1-7DA	2.5	12.7-13.7	≥40dB@11.2&14.6GHz	7×3.2×0.26	137
BMBP13R25/1R7-9UA	3.5	12.4-14.1	≥40dB@11.6&15.3GHz	8×3.5×0.26	138
BMBP 13R4/1R4-7DA	3.5	12.9-14.1	≥40dB@11.2&15GHz	8×3.5×0.26	139
BMBP13R4/3R6-12DA	2.0	11.6-15.2	≥40dB@10.5&16.85GHz	8×3.2×0.26	140
BMBP13R6/R4-7SA	5.0	13.4-13.8	≥40dB@12.85&14.35GHz	7×3×0.26	141
BMBP13R7/4R2-8DA	1.5	11.75-15.75	≥40dB@9.3&17.6GHz	6×3×0.26	142
BMBP14/4-10DA	2.0	12-16	≥40dB@10.6&17.6GHz	9.5×3×0.39	143
BMBP14/7R4-8DA	1.5	10.3-17.7	≥40dB@7.45&19.9GHz	6×4×0.39	144
BMBP 14R25/1R1-7DA	2.5	13.7-14.7	≥40dB@12.2&15.6GHz	7×3.2×0.26	145
BMBP14R3/1R45-7DA	3.0	13.9-15.1	≥40dB@12.5&15.95GHz	8×3.3×0.26	146
BMBP 14R4/1R9-8UA	3.5	13.45-15.35	≥40dB@12.5&17.2GHz	9×3.4×0.26	147
BMBP14R45/1R9-8UA	3.5	13.6-15.4	≥40dB@12.7&16.5GHz	9×3.4×0.26	148
BMBP14R5/1R6-7UA	4.0	13.75-15.3	≥40dB@12.8&16.6GHz	9×3.3×0.26	149
BMBP14R85/2R3-7DA	2.5	13.9-16	≥40dB@11.6&17.2GHz	7×3.2×0.26	150

BMBP15/1R8-9UA	3.5	14.1-15.9	≥40dB@13.1&17.2GHz	8×3.2×0.26	151
BMBP 15R25/1R1-8SA	3.5	14.7-15.7	≥40dB@13.8&16.6GHz	7×3×0.26	152
BMBP15R4/1R6-7UA	4.5	14.7-16.2	≥40dB@13.8&17.4GHz	9×3.0×0.26	153
BMBP 15R55/1R3-7DA	3.5	14.9-16.1	≥40dB@13.3&17.0GHz	8×3.2×0.26	154
BMBP 15R75/4R7-10DA	2.0	13.45-17.7	≥40dB@11.5&20.5GHz	7×3×0.26	155
BMBP15R8/2R2-9UA	3.5	14.8-16.9	≥40dB@13.6&18.6GHz	9×3.2×0.26	156
BMBP15R85/2R1-8DA	2.5	14.9-16.9	≥40dB@13.0&18.2GHz	7×3.2×0.26	157
BMBP15R85/2R2-9UA	3.5	14.8-16.9	≥40dB@13.8&18.3GHz	9×3.2×0.26	158
BMBP16/2R2-8DA	2.5	14.9-17.1	≥40dB@13.3&18.2GHz	7×3.2×0.26	159
BMBP16R25/4R5-7DA	2.0	14-18.5	≥35dB@11.75&20.2GHz	7×2.9×0.39	160
BMBP16R3/3R4-12DA	2.5	14.6-18.0	≥40dB@13.2&19.8GHz	8.5×3.2×0.26	161
BMBP16R4/1R6-7UA	4.5	15.7-17.2	≥40dB@14.6&18.6GHz	9×3.0×0.26	162
BMBP16R45/1R3-7DA	3.5	15.8-17.1	≥40dB@14.3&18.0GHz	8×3.2×0.26	163
BMBP16R65/4R9-8DA	2.0	14.2-19.1	≥40dB@11.2&22.0GHz	6×2.7×0.26	164
BMBP17/2-7DA	2.5	15.8-18	≥40dB@13.5&19.2GHz	7×3.0×0.26	165
BMBP17R2/2R2-9UA	3.5	16.2-18.3	≥40dB@15.0&20.2GHz	9×3×0.26	166
BMBP17R25/1R9-9UA	3.5	16.3-18.2	≥40dB@15.3&19.5GHz	9×3×0.26	167
BMBP17R45/1R5-8UA	4.5	16.7-18.2	≥40dB@15.5&19.5GHz	9×3.0×0.26	168
BMBP17R5/1R8-7DA	2.5	16.8-18.4	≥40dB@15.0&19.7GHz	7×3.0×0.26	169
BMBP17R95/2R4-8DA	2.5	16.95-19.05	≥40dB@15.0&20.25GHz	7×3.0×0.26	170
BMBP18R1/2R2-8DA	2.5	17-19.2	≥40dB@15.0&20.3GHz	7×3.0×0.26	171
BMBP18R75/8-8DA	1.3	14.75-22.75	≥40dB@9&30GHz	4.5×3.0×0.39	172
BMBP20R6/4-6DA	2.0	18.6-22.4	≥40dB@15.0&24.5GHz	5.5×2.5×0.26	173
BMBP20R65/4R1-6DA	1.5	19.0-22.6	≥40dB@15.0&24.5GHz	5.5×2.5×0.26	174
BMBP20R75/3R7-6DA	2.0	19.0-22.6	≥40dB@15.0&24.5GHz	5.5×2.5×0.26	175
BMBP21R5/R8-6PA	3.5	21.15-21.85	≥40dB@20.3&22.7GHz	11×3.5×0.26	176
BMBP21R55/R7-6PA	3.5	21.2-21.9	≥40dB@20.3&22.8GHz	11×3.5×0.26	177
BMBP21R9/1R6-6PA	2.5	21.1-22.7	≥40dB@20.0&24.0GHz	9.5×3.2×0.26	178
BMBP21R9/4R1-8DA	2.5	19.9-23.9	≥40dB@17.5&25.5GHz	7×2.8×0.26	179
BMBP22R15/2R7-6PA	2.5	20.9-23.2	≥40dB@19.6&25.2GHz	10×3.5×0.26	180

BMBP22R2/2R6-6PA	2.0	20.9-23.3	≥40dB@19.6&25.4GHz	10×3.5×0.26	181
BMBP22R8/R8-6PA	3.5	22.5-23.1	≥40dB@21.4&24.2GHz	11×3.5×0.26	182
BMBP22R85/R7-6PA	3.5	22.5-23.2	≥40dB@21.5&24.3GHz	11×3.5×0.26	183
BMBP23/7R4-6DA	1.5	19.3-26.7	≥40dB@14.5&32.5GHz	4.5×2.5×0.26	184
BMBP23R25/6R9-6DA	1.5	19.8-26.7	≥40dB@15&32GHz	4.5×2.5×0.26	185
BMBP25R7/7R2-8DA	2.5	22.2-29.3	≥40dB@17.5&34.5GHz	6×1.9×0.26	186
BMBP26R5/8-8PA	1.5	22.5-30.5	≥40dB@19.5&33.6GHz	10.5×2×0.26	187
BMBP26R5/8R8-8DA	2.0	22.4-30.0	≥40dB@19.0&34GHz	14×2×0.26	188
BMBP27R65/1R5-6PA	3.0	26.9-28.1	≥40dB@25.0&29.6GHz	8×3×0.26	189
BMBP27R9/8R6-8DA	1.5	23.6-32.2	≥40dB@19&37.0GHz	6×2.5×0.26	190
BMBP28/8-8DA	1.5	24.1-32	≥40dB@19.5&37GHz	6×2.5×0.26	191
BMBP29R2/4-6PA	1.5	27.2-31.2	≥40dB@24.5&34.9GHz	8×3×0.26	192
BMBP29R35/5R1-6PA	1.5	26.8-31.2	≥40dB@24&34.5GHz	7×2×0.26	193
BMBP30R3/8-8PA	1.0	26.7-34.3	≥40dB@23.4 GHz ≥30dB@37.3GHz	8.5×2×0.26	194
BMBP30R5/4-6PA	1.5	28.75-32.5	≥40dB@26&35.5GHz	8×3×0.26	195
BMBP30R7/3R8-6PA	2.0	28.8-32.6	≥40dB@26.0&35.5GHz	8×3×0.26	196
BMBP30R7/4R2-8PA	2.0	28.6-32.5	≥40dB@26.5&34.8GHz	9×2.6×0.26	197
BMBP30R75/1R3-6PA	2.5	30.1-31.3	≥40dB@28.3&32.6GHz	8×3×0.26	198
BMBP30R8/3R6-9PA	2.0	29.3-32.3	≥40dB@27&34.6GHz	9×2.6×0.26	199
BMBP33R5/3R4-6PA	2.0	31.8-35.8	≥40dB@29.5&38.7GHz	7×2.3×0.26	200
BMBP34/12-9XA	1.0	28-40	≥40dB@22.2 GHz ≥20dB@44.8GHz	8×2.5×0.26	201
BMBP34R5/3R4-6PA	1.5	32.8-36.2	≥40dB@29.6 GHz ≥35dB@39.1GHz	8×3×0.26	202
BMBP34R5/9-8PA	1.5	30-39	≥40dB@27&44GHz	8×1.9×0.26	203
BMBP34R55/9R7-8PA	1.5	29.7-39.4	≥40dB@26.5&44.5GHz	8×1.9×0.26	204
BMBP34R6/10R2-8PA	1.5	29.5-39.7	≥40dB@26.2&44.5GHz	8×2×0.26	205
BMBP34R7/10R2-8PA	1.5	29.7-39.2	≥40dB@26&45GHz	11×2×0.26	206
BMBP35/1R4-6PA	3.0	34.55-35.7	≥40dB@32.0&37.2GHz	8.5×3×0.26	207
BMBP35/2R4-6PA	2.0	33.8-36.2	≥40dB@32GHz ≥30dB@39GHz	8.5×3×0.26	208

BMBP35R4/2R2-6PA	2.0	34.3-36.5	≥40dB@32.4GHz ≥30dB@38.5GHz	8×2.8×0.26	209
BMBP35R7/R6-6PA	5.0	35.4-36.0	≥40dB@34.2&37.0GHz	18B2601	210
BMBP35R7/4-8PA	2.0	33.7-37.2	≥40dB@30.5&41GHz	7.5×2.5×0.26	211

Thin Film Low Pass Filter

Model	Frequency (GHz)	I. L. @f ₀ (dB)	Attenuation (dB)	Size(mm)	Page
BMLP2R4-7C	DC~2.4	1.5	≥30 dB @3.5GHz	4.5×5.0×0.39	212
BMLP3-5A	DC~3	1.5	≥30 dB @5.25GHz	7×3.5×0.26	213
BMLP4R6-9A	DC~4.6	1.5	≥30 dB @5.8GHz	7×5×0.26	214
BMLP6R2-9A	DC~6.2	1.5	≥30 dB @7.7GHz	5×3.9×0.26	215
BMLP10R5-9A	DC~10.5	1.5	≥30 dB @13.0GHz	5.5×2.8×0.26	216
BMLP12R5-9A	DC~12.5	1.5	≥30 dB @15.0GHz	5×2.2×0.26	217
BMLP14R95-9A	DC~14.95	1.5	≥30 dB @18.3GHz	5×2×0.26	218
BMLP15-9A	DC~15	1.5	≥30 dB @18.5 GHz	5×2×0.26	219
BMLP16-9A	DC~16	1.5	≥30 dB @19.2GHz	5×2×0.26	220
BMLP16R1-9A	DC~16.1	1.5	≥30 dB @19.2GHz	5×2×0.26	221
BMLP20R4-9A	DC~20.4	1.5	≥30 dB @24.8GHz	5×1.6×0.26	222

Performance characteristics

- High precision film processing
- High performance, Low Tcc,
- high power Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

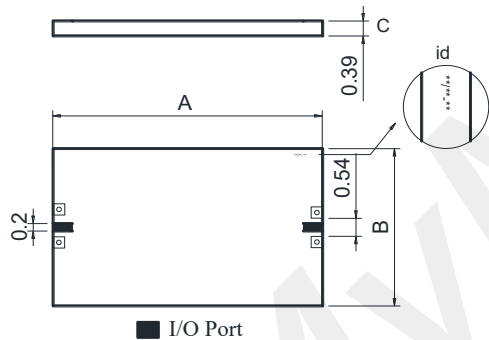
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

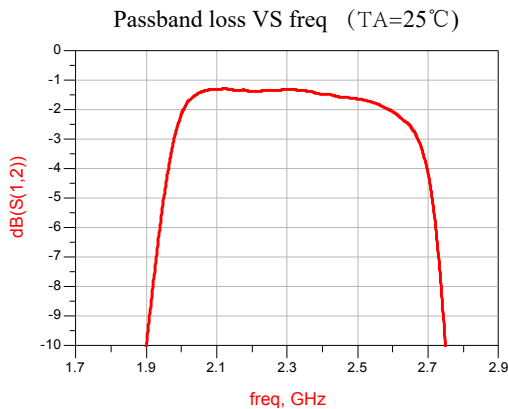
items	Min	typ	Max	Unit
Center Freq(f_0)	-	2.3	-	GHz
Passband freq range	2.0	-	2.6	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@1.4GHz		-	dB
	≥40@2.92GHz		-	dB

Dimensions

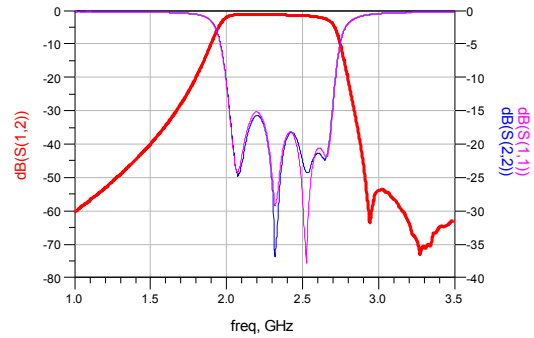


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	7.4	-	7.5

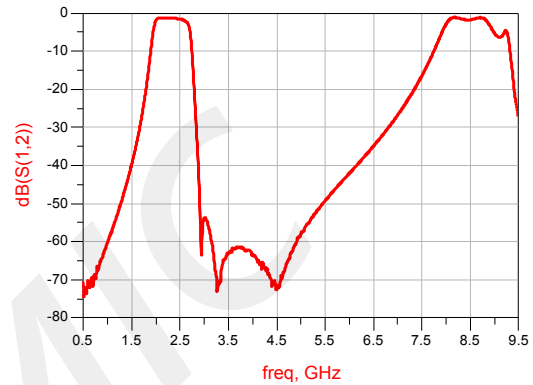
Typical test curve



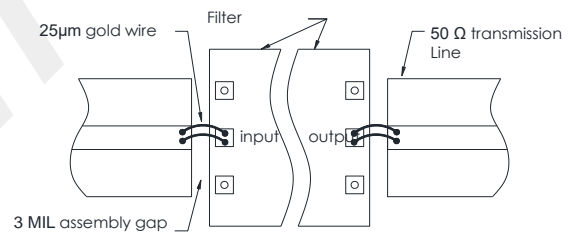
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

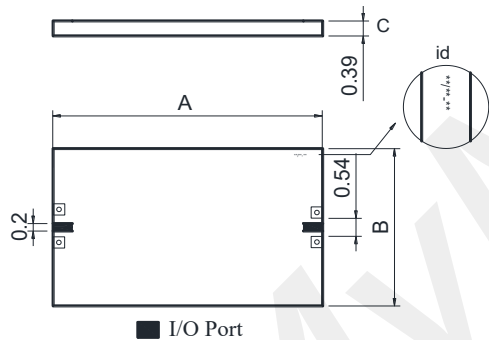
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

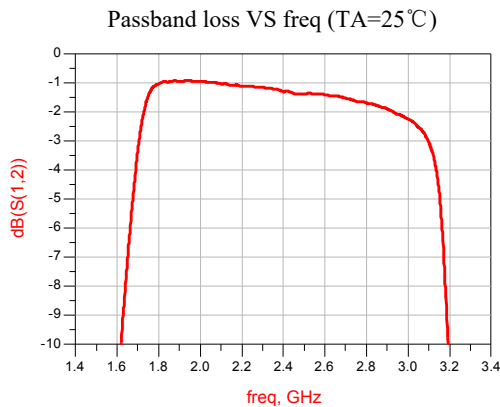
items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.3	-	GHz
Passband freq range	1.8	-	2.8	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@1.0GHz			dB
	≥40@3.35GHz			dB

Dimensions

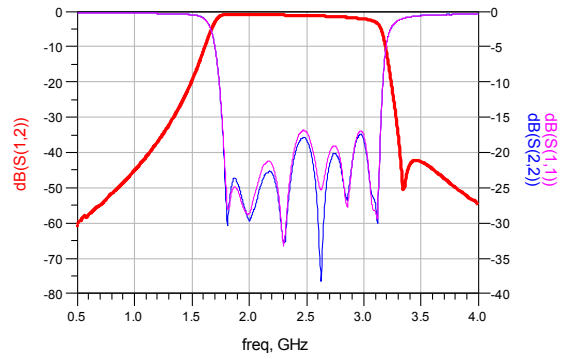


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.4	-	6.5
B	8.4	-	8.5

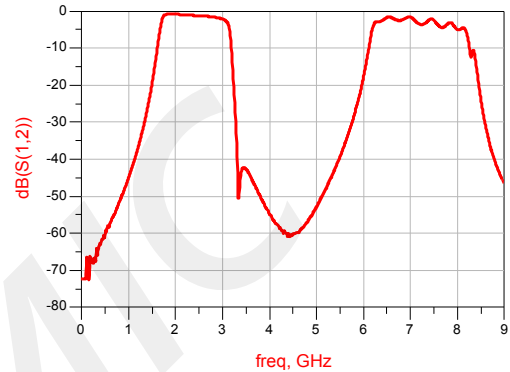
Typical test curve



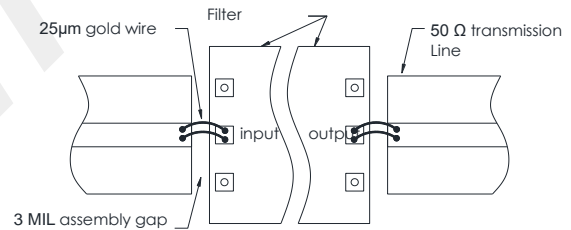
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

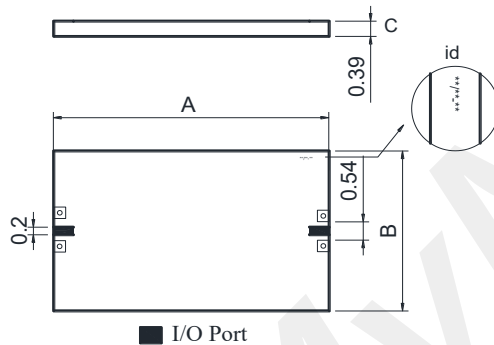
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	2.5	-	GHz
Pass-band Freq range	2.35	-	2.65	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@1.92GHz			dB
	≥40@2.9GHz			dB

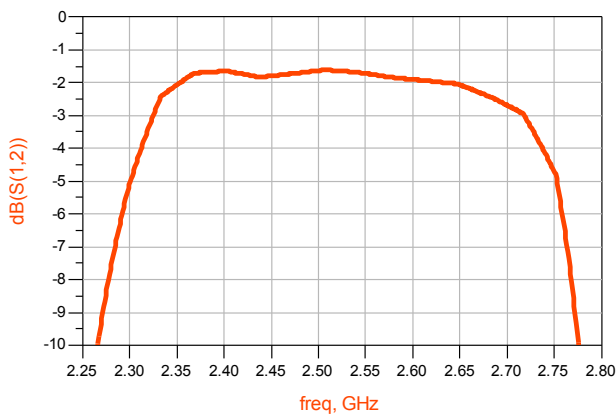
Dimensions



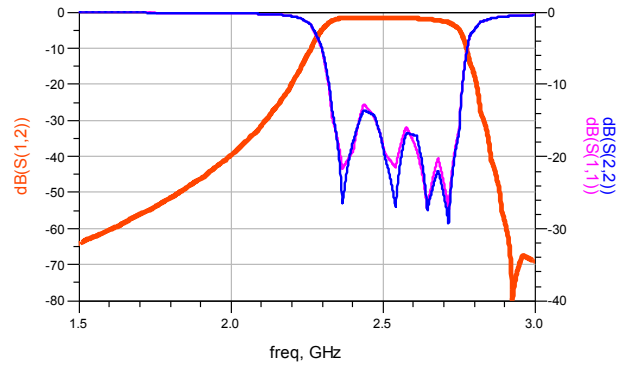
Size symbol:	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	8.4	-	8.5

Typical test curve

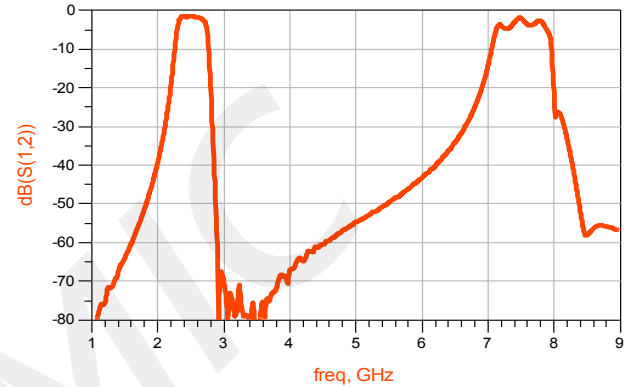
Passband loss VS freq TA=25°C)



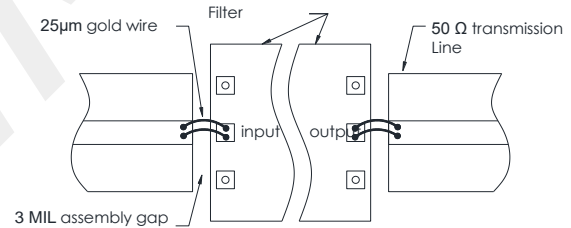
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

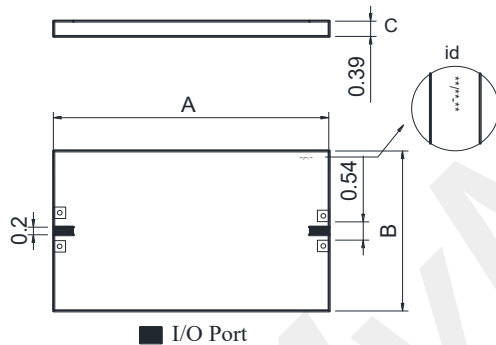
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.5	-	GHz
Passband freq range	2	-	3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@1.2GHz			dB
	≥40@3.6GHz			dB

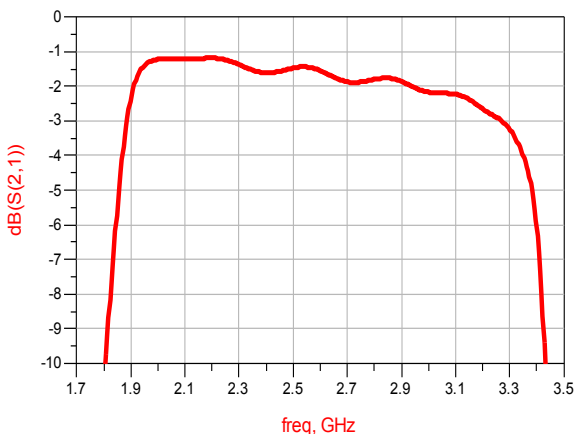
Dimensions



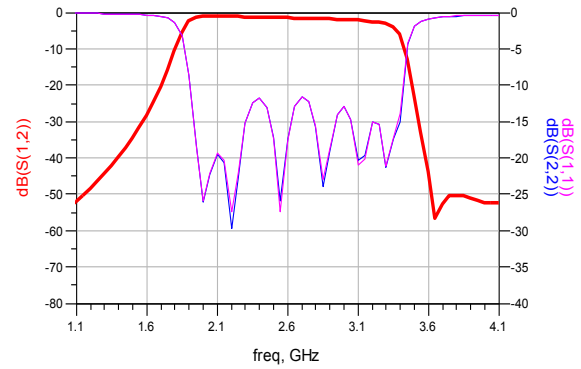
Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	8.4	-	8.5

Typical test curve

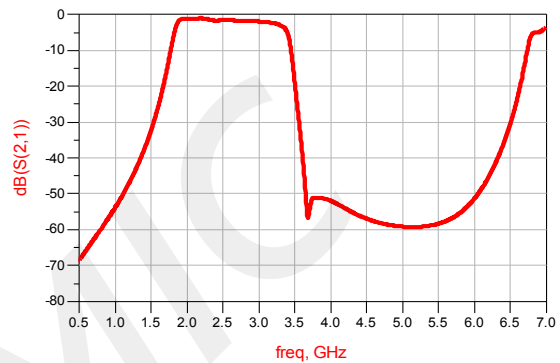
Passband loss VS freq 25°C)



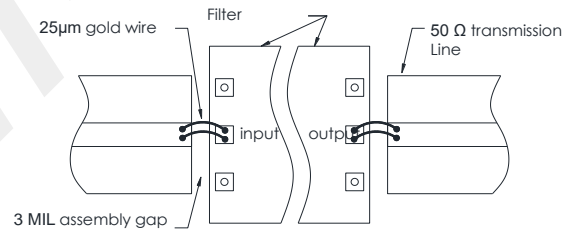
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

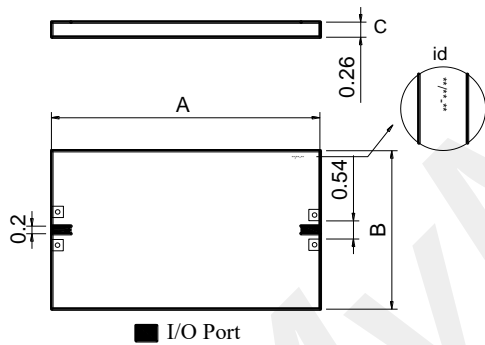
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

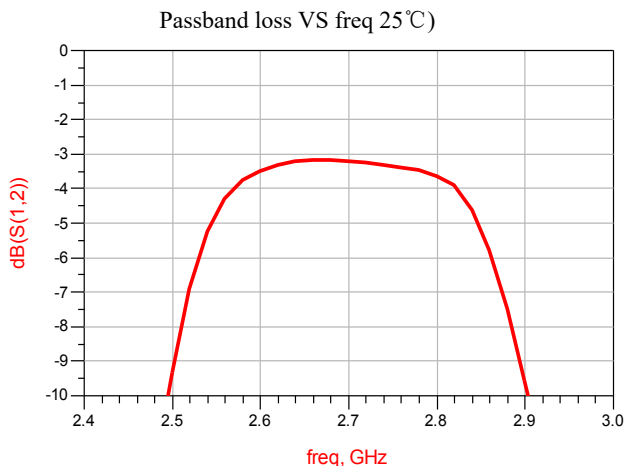
items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.7	-	GHz
Passband freq range	2.6	-	2.8	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@2.2GHz			dB
	≥40@3.5GHz			dB

Dimensions

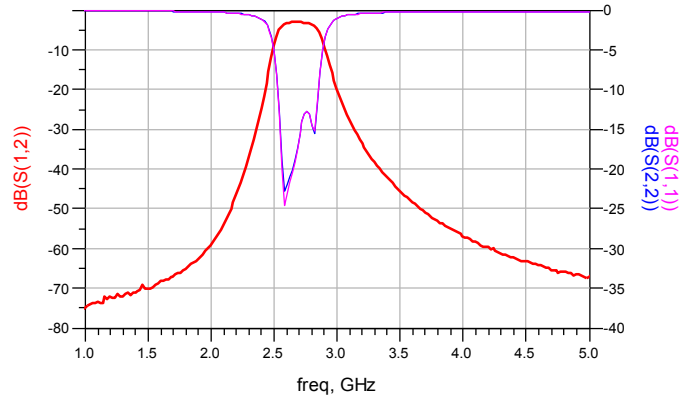


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	4.9	-	5.0

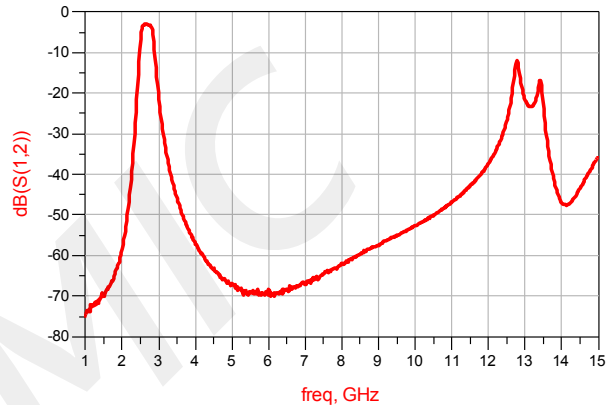
Typical test curve



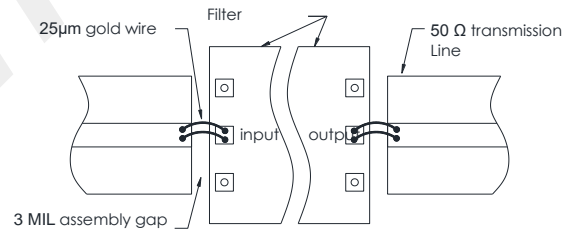
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

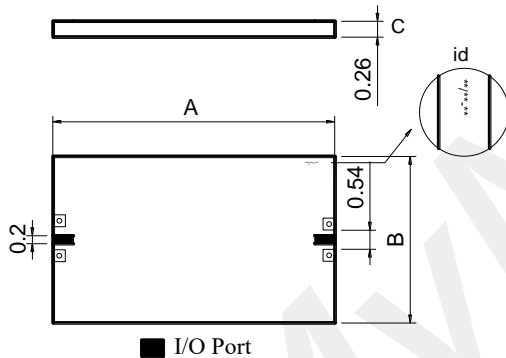
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

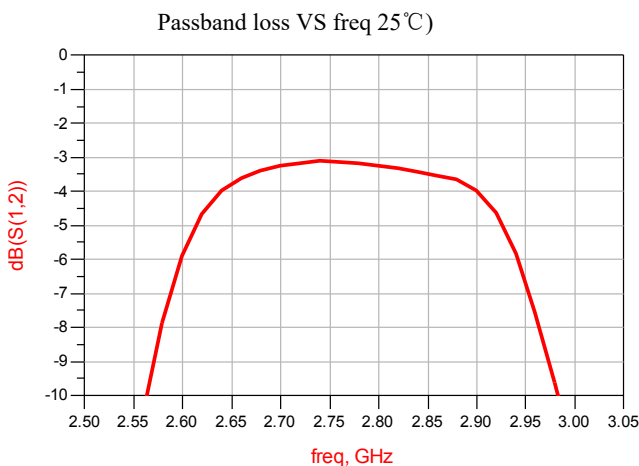
items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.75	-	GHz
Passband freq range	2.65	-	2.85	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@2.3GHz			dB
	≥40@3.6GHz			dB

Dimensions

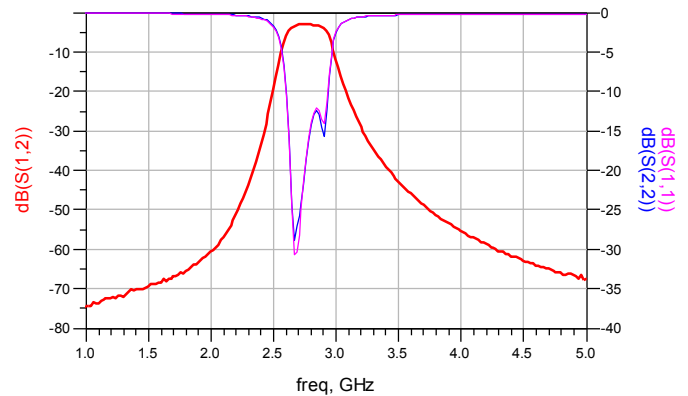


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	4.9	-	5.0

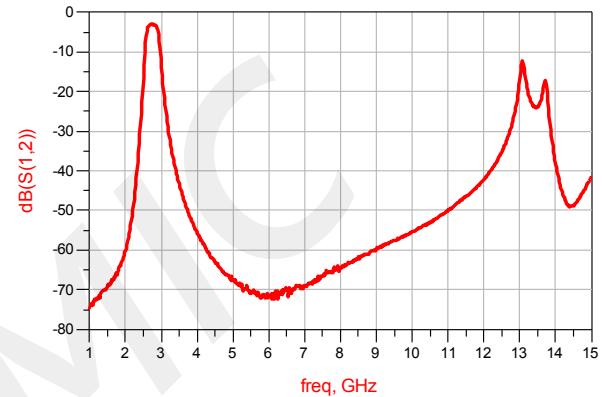
Typical test curve



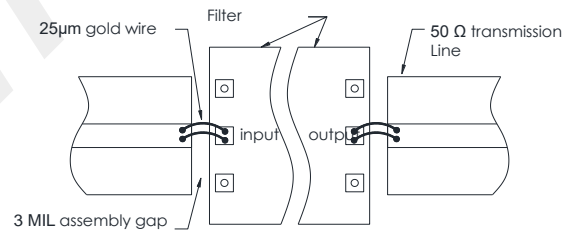
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

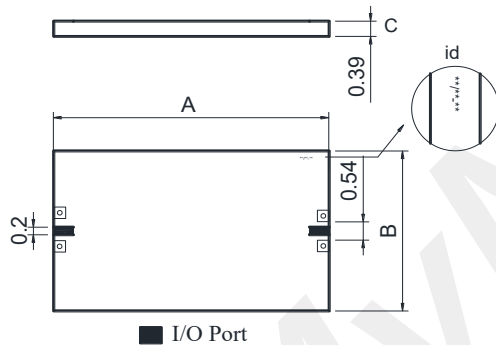
Environmental parameters

Operation temperature	-55°C ~ +85°C
Storage temperature	-55°C ~ +125°C
Max input Power	35dBm

Electrical Specification (T_A = +25°C)

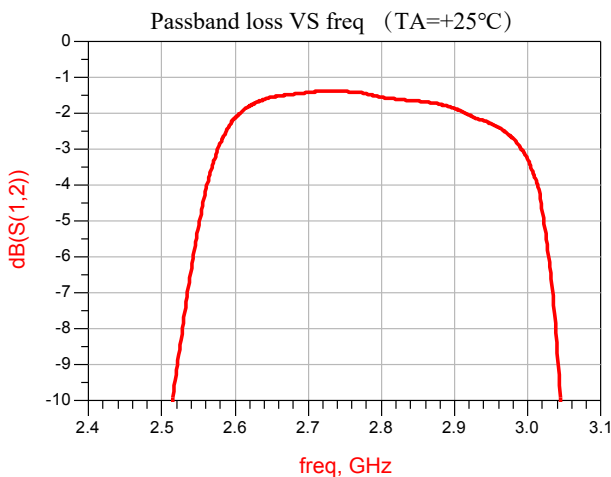
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.75	-	GHz
Passband freq range	2.6	-	2.9	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	25	-	dB
Out-of-band atten	≥40@1.7GHz		-	dB
	≥40@3.2GHz		-	dB

Dimensions

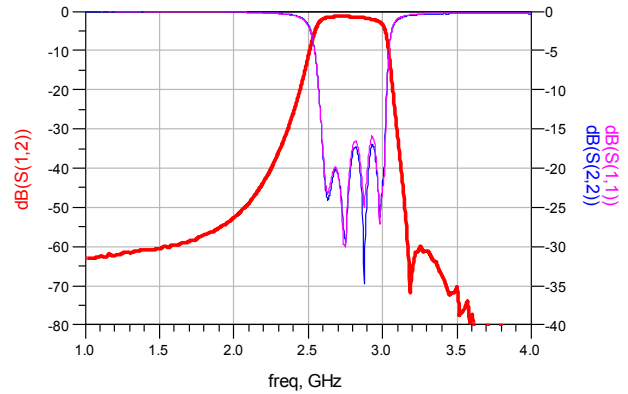


Size symbol	Value (mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	7.7	-	7.8

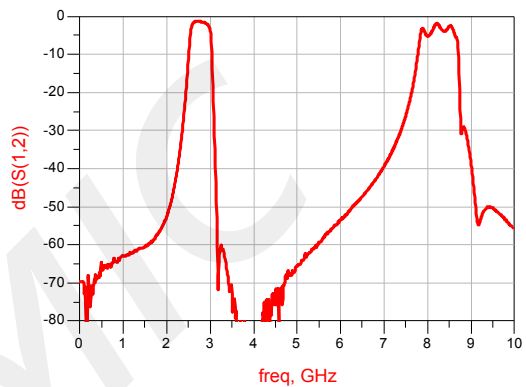
Typical test curve



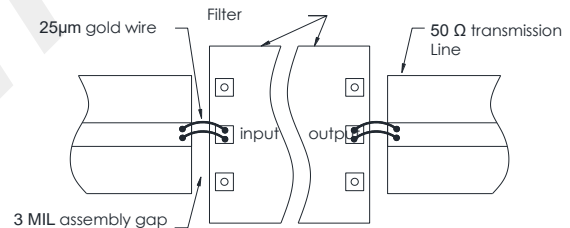
Out-of-band rejection & Return loss VS freq (T_A = 25°C)



Remote suppression VS freq (T_A = 25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

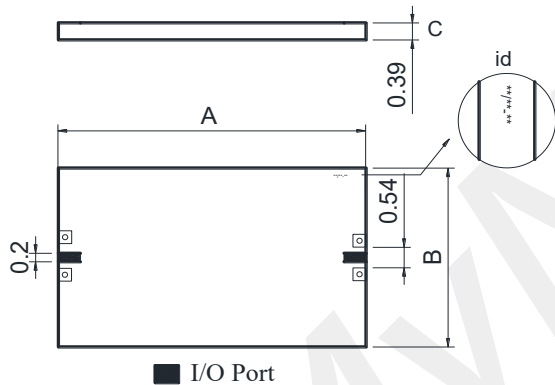
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

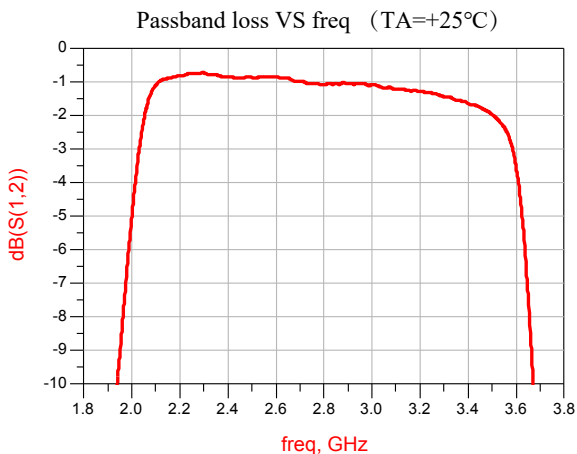
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.75	-	GHz
Passband freq range	2.1	-	3.4	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@1.25GHz			dB
	≥40@4GHz			dB

Dimensions

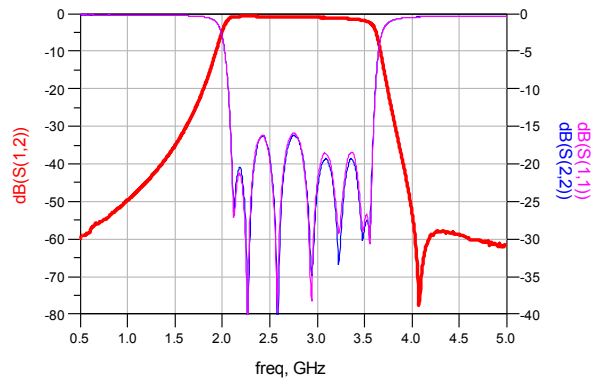


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	7.7	-	7.8

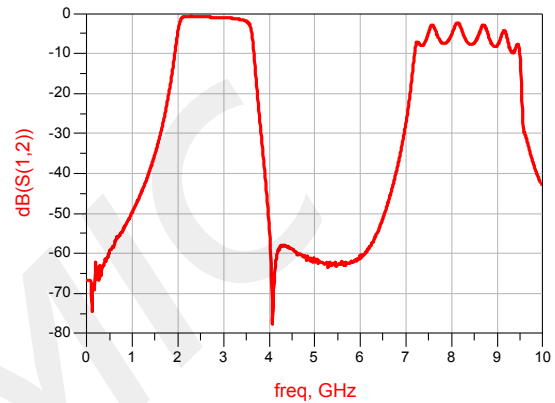
Typical test curve



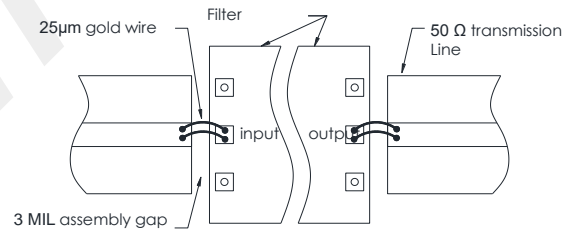
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

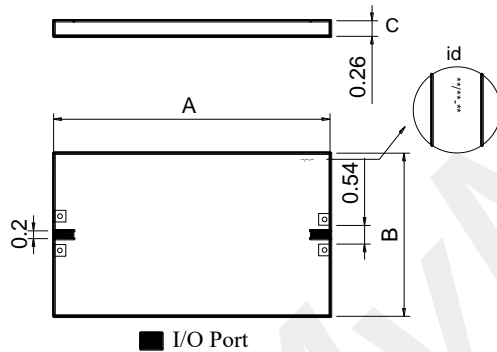
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

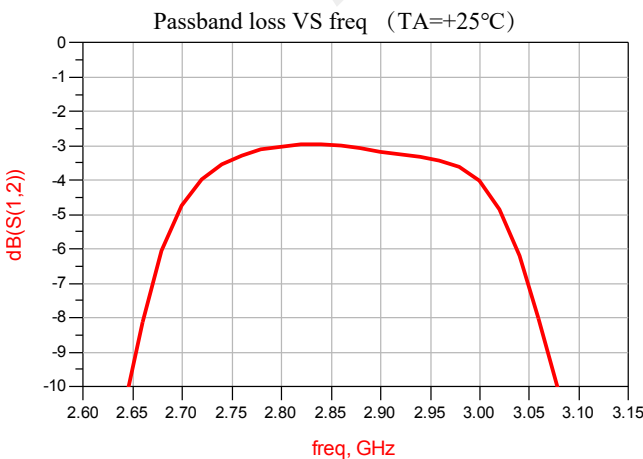
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	2.85	-	GHz
Passband freq range	2.75	-	2.95	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@2.35GHz			dB
	≥40@3.7GHz			dB

Dimensions

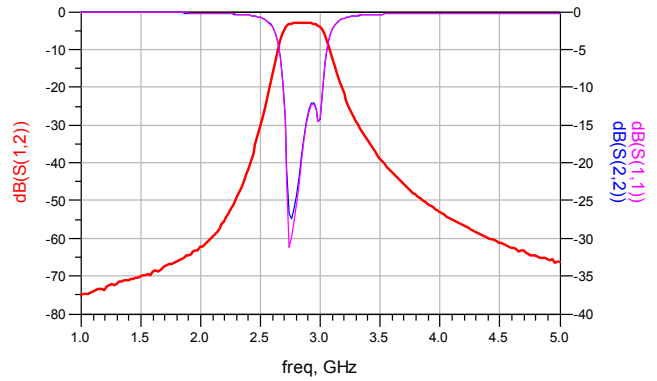


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	4.9	-	5.0

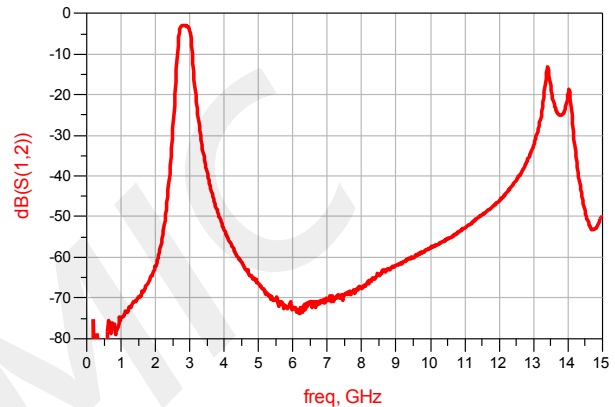
Typical test curve



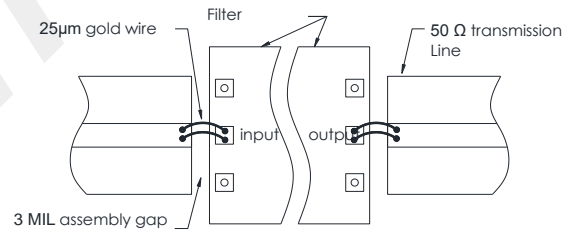
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

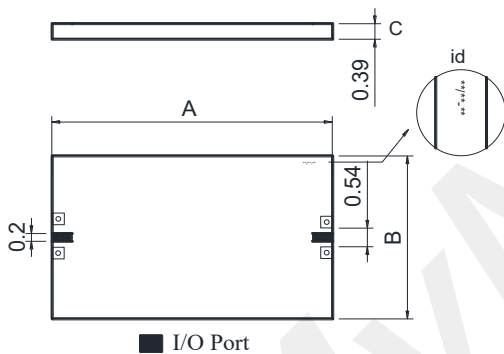
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

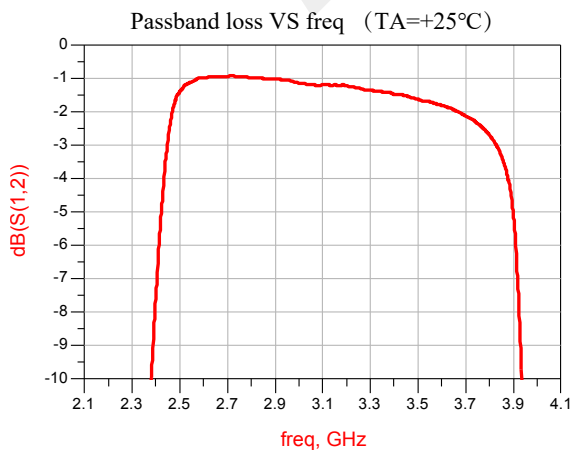
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	3	-	GHz
Passband freq range	2.5	-	3.5	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@1.9GHz			dB
	≥40@4.15GHz			dB

Dimensions

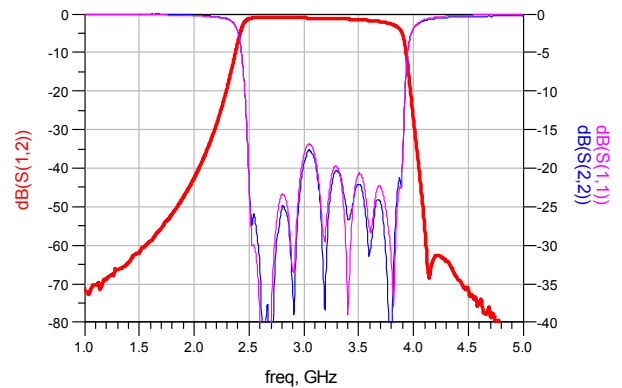


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	7.7	-	7.8

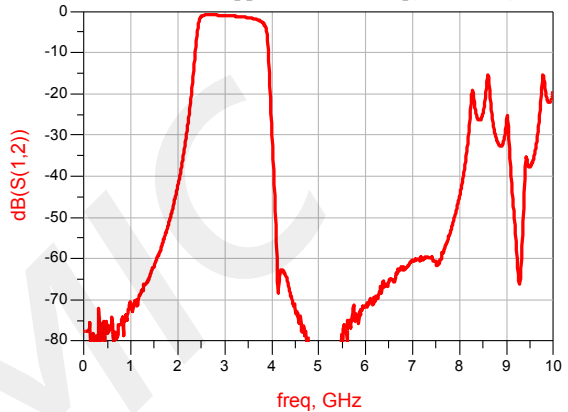
Typical test curve



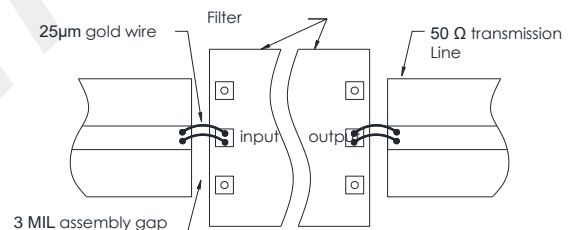
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

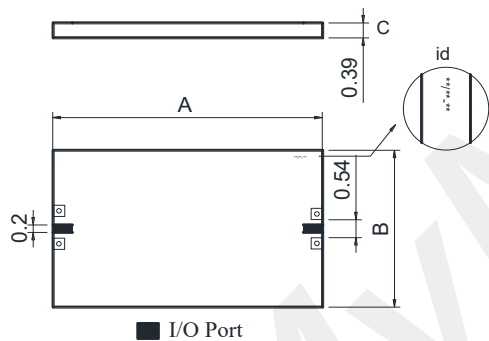
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

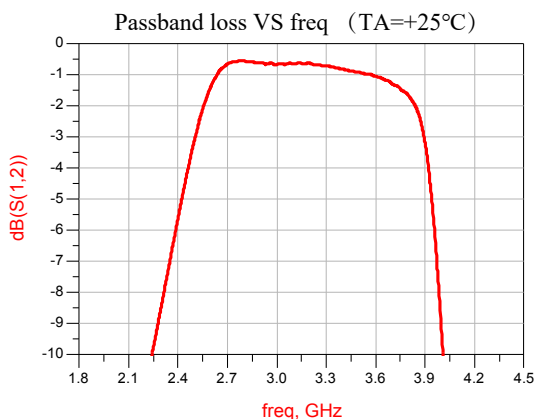
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	3.1	-	GHz
Passband freq range	2.7	-	3.5	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	1.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@0.4GHz			dB
	≥40@4.5GHz			dB

Dimensions

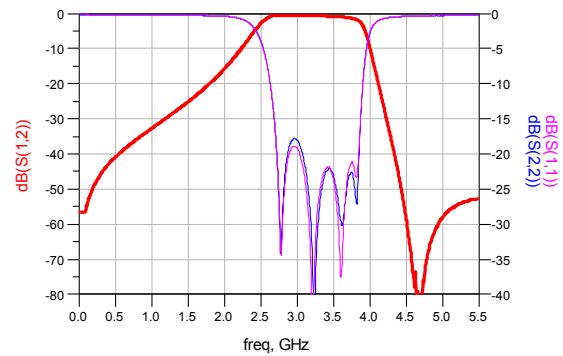


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.05	-	6.15
B	6.05	-	6.15

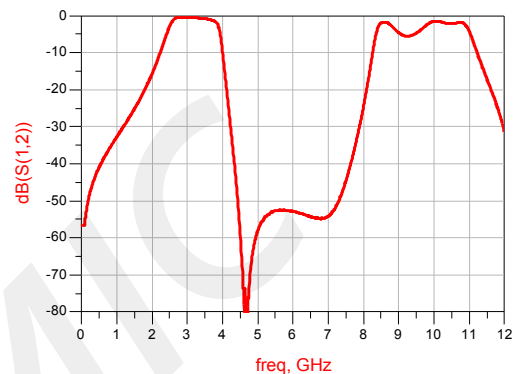
Typical test curve



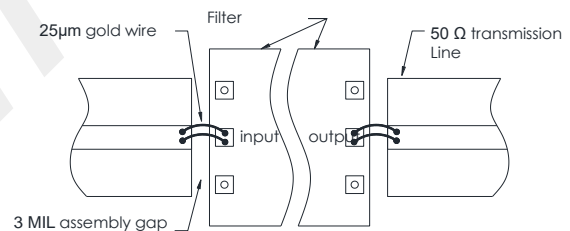
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

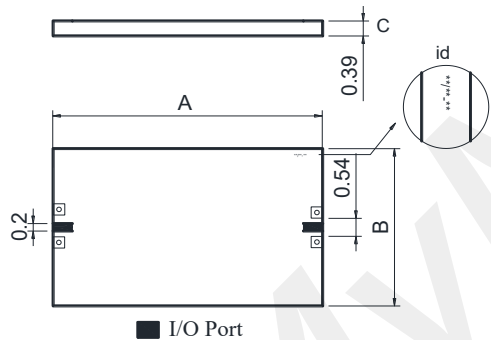
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

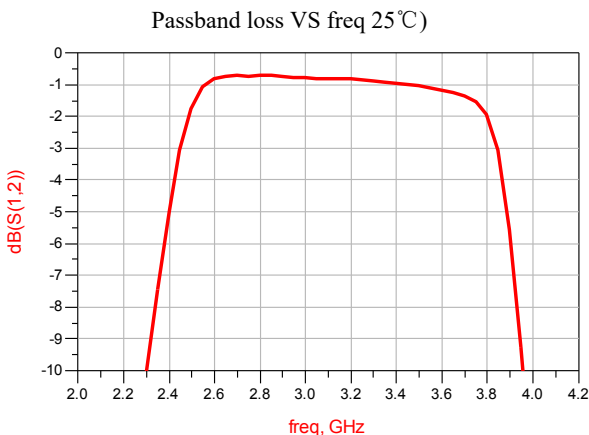
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	3.15	-	GHz
Passband freq range	2.55	-	3.75	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	25	-	dB
Out-of-band atten	≥40@1.3GHz		-	dB
	≥40@4.4GHz		-	dB

Dimensions

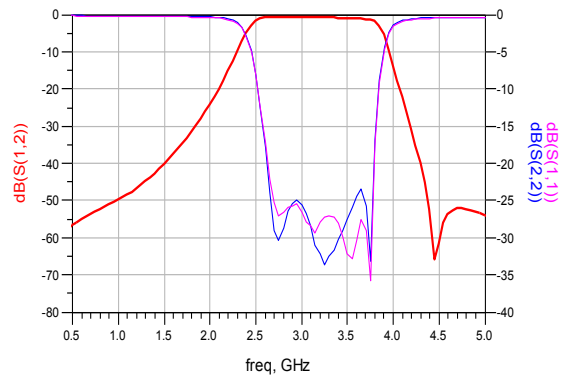


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	6.6	-	6.7

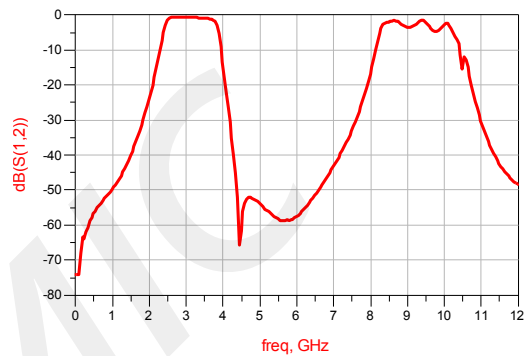
Typical test curve



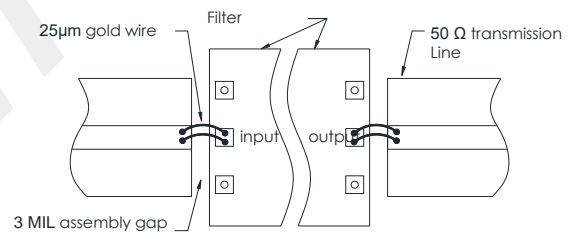
Out-of-band rejection & Return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

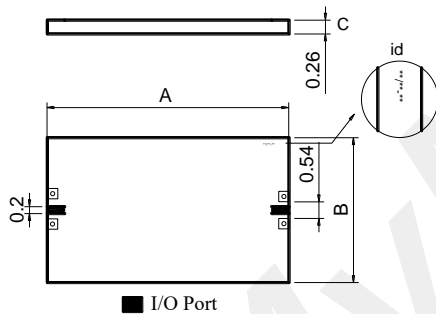
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

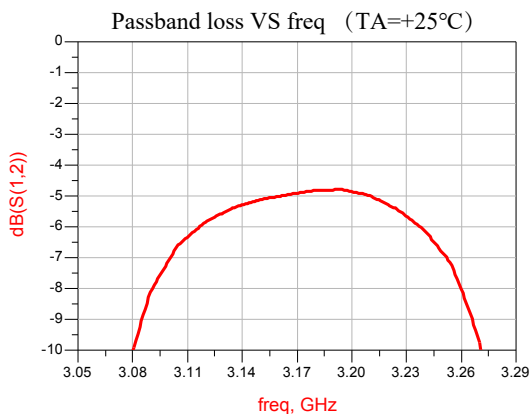
Items	Min	typ	Max	Unit
Center Freq(f_0)	-	3.18	-	GHz
Passband freq range	3.13	-	3.23	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	5.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@2.95GHz			dB
	≥40@3.4GHz			dB

Dimensions

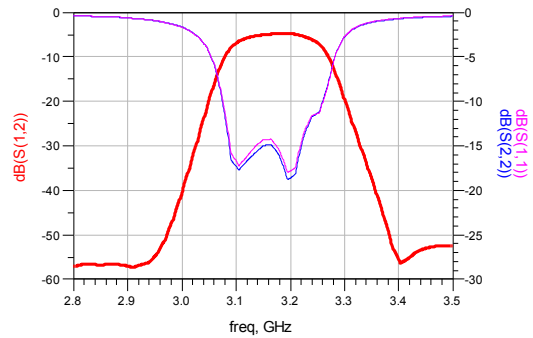


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	8.9	-	9.0

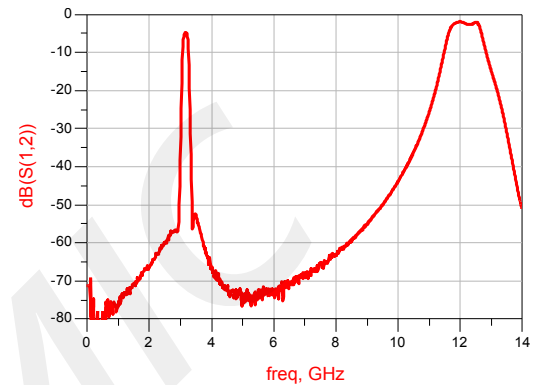
Typical test curve



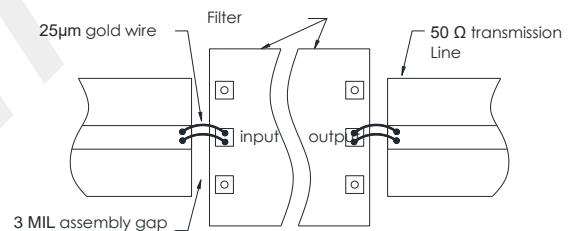
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

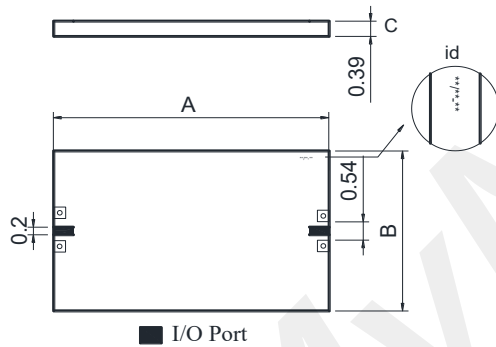
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification (T_A=+25°C)

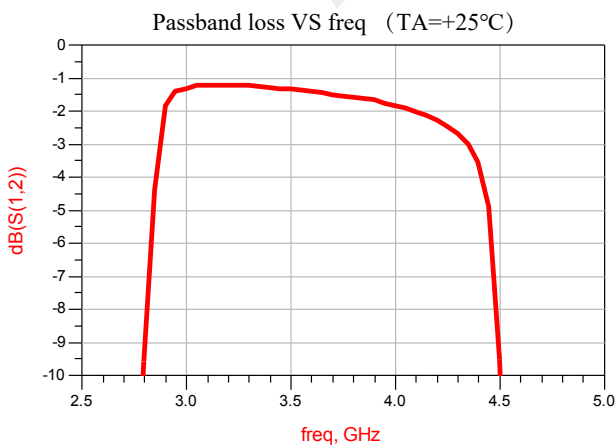
Items	Min	typ	Max	Unit
Center Freq(f ₀)	-	3.5	-	GHz
Passband freq range	2.9	-	4.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@2.2GHz		-	dB
	≥40@4.75GHz		-	dB

Dimensions

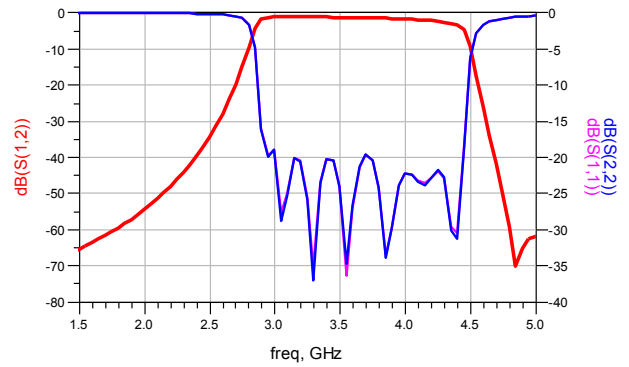


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	6.5	-	6.6

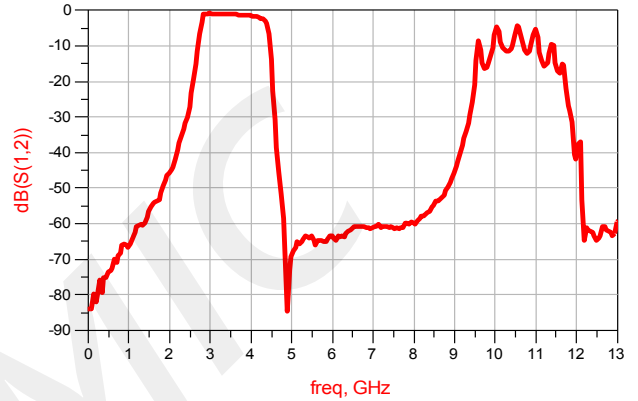
Typical test curve



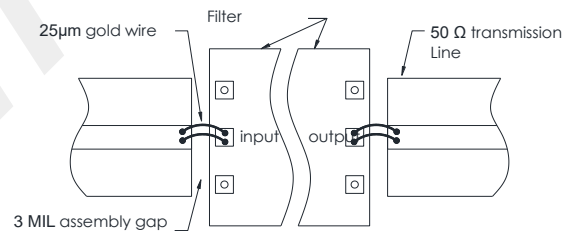
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq (TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

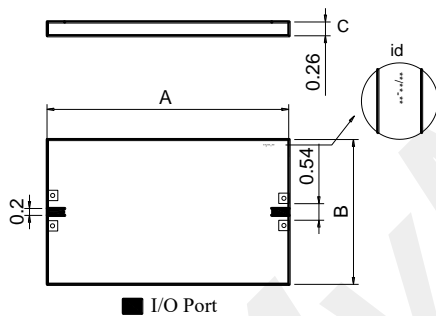
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

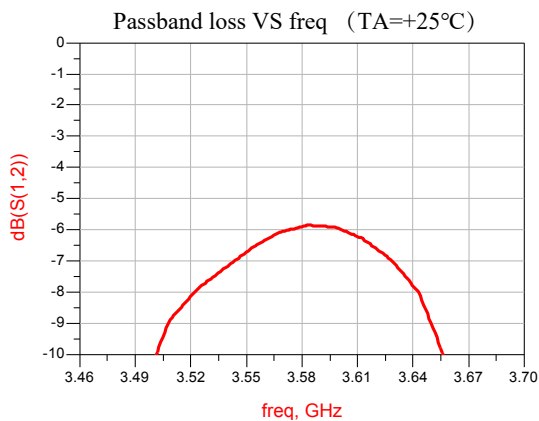
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	3.59	-	GHz
Passband freq range	3.58	-	3.60	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	6.5	-	dB
Return loss	-	12	-	dB
Out-of-band atten	≥40@3.35GHz		-	dB
	≥40@3.8GHz		-	dB

Dimensions

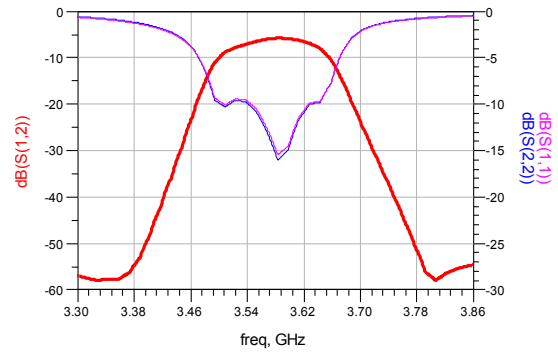


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	7.9	-	8.0

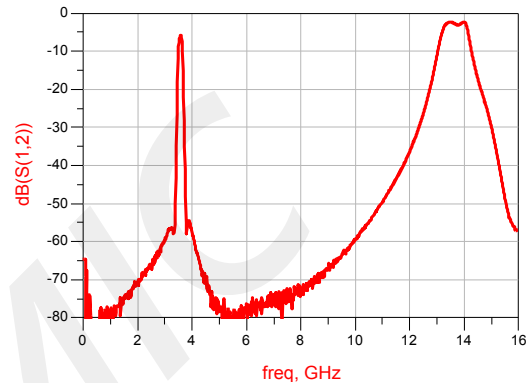
Typical test curve



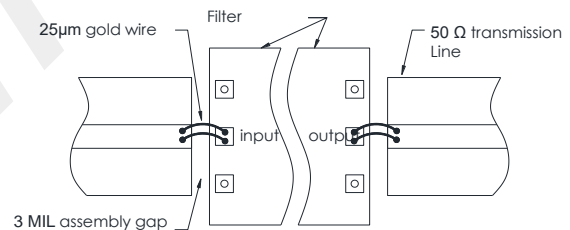
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

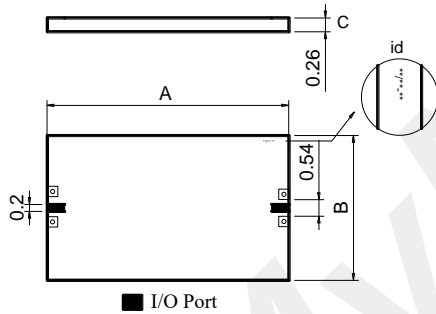
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

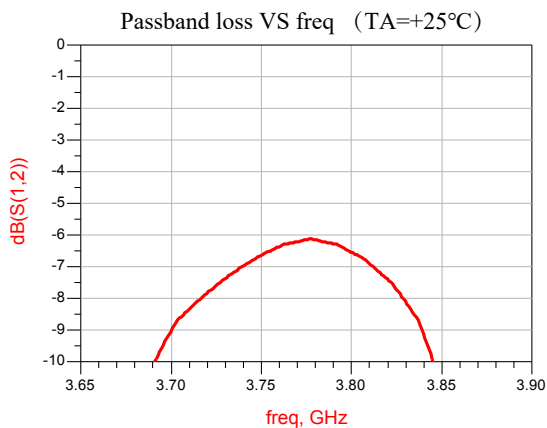
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	3.78	-	GHz
Passband freq range	3.76	-	3.80	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	6.5	-	dB
Return loss	-	11	-	dB
Out-of-band atten	≥40@3.55GHz		-	dB
	≥40@4.0GHz		-	dB

Dimensions

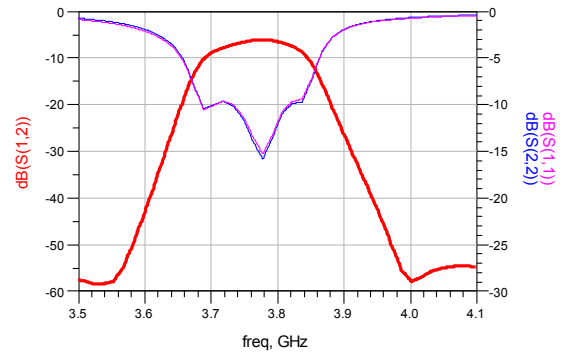


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	7.6	-	7.7

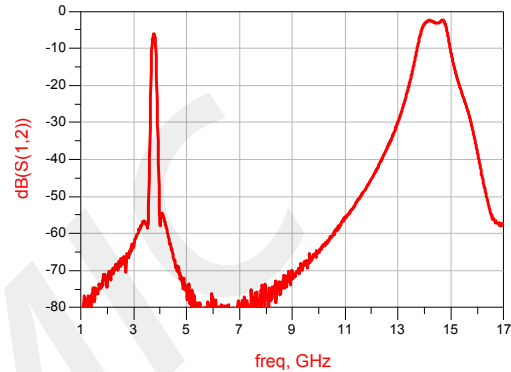
Typical test curve



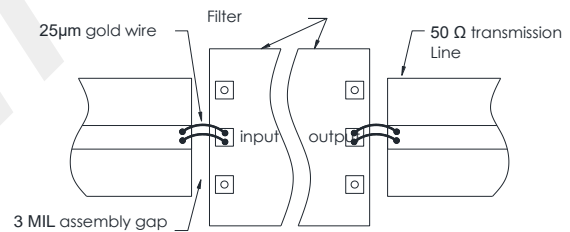
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

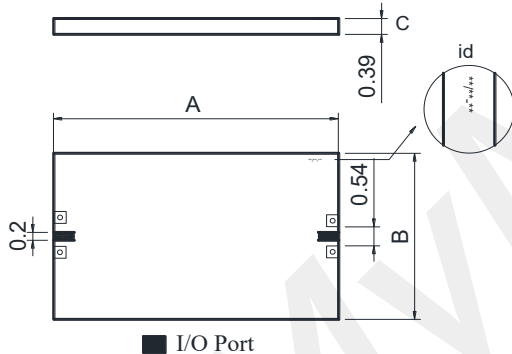
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification (T_A=+25°C)

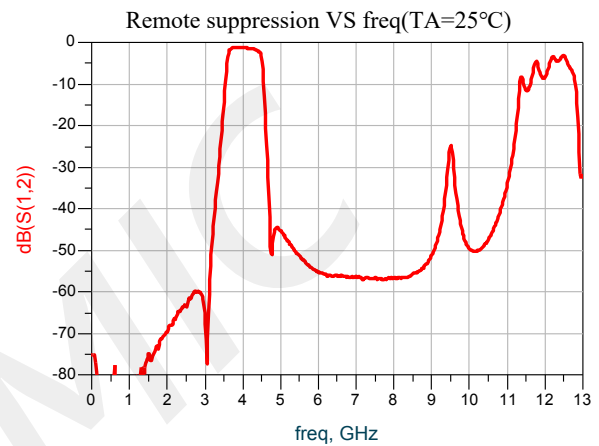
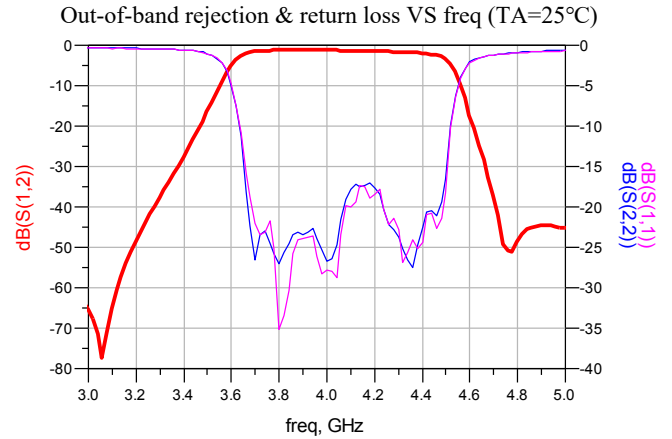
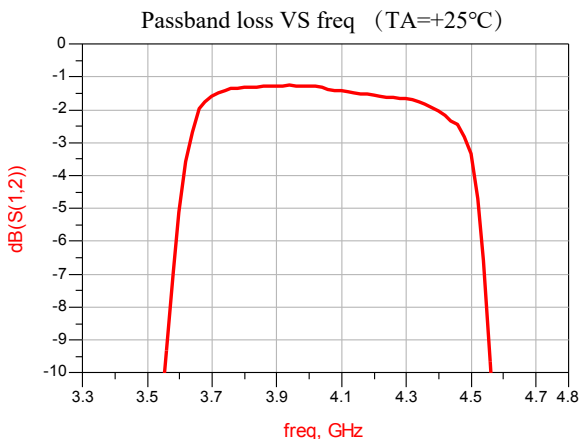
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.0	-	GHz
Passband freq range	3.7	-	4.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@3.15GHz		-	dB
	≥40@4.8GHz		-	dB

Dimensions

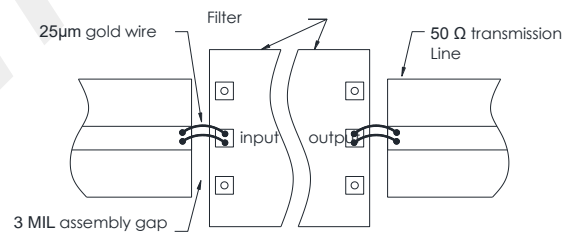


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	6.5	-	6.6

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

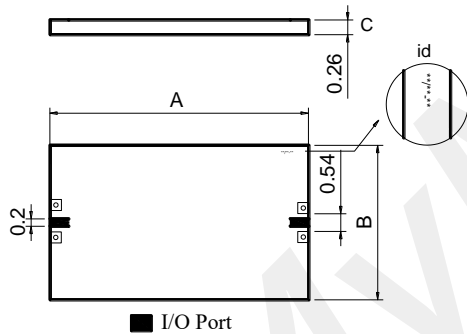
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

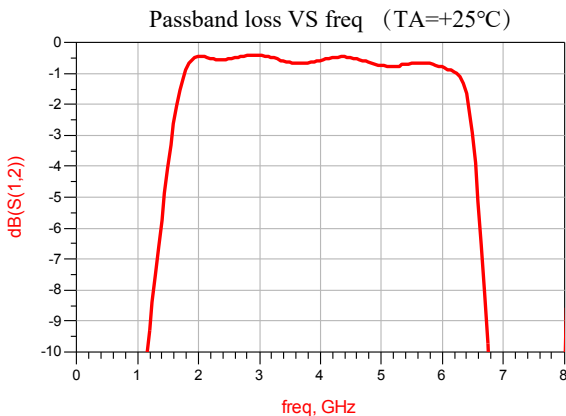
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.0	-	GHz
Passband freq range	1.8	-	6.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥25@0.2GHz			dB
	≥30@7.45GHz			dB

Dimensions

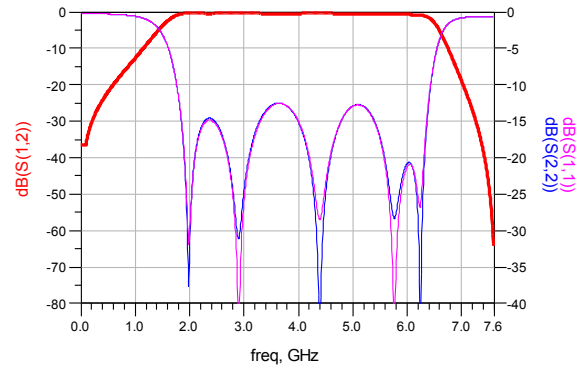


Size symbol	Value(mm)		
	Min	Nominal	Max
A	11.9	-	12.0
B	4.9	-	5.0

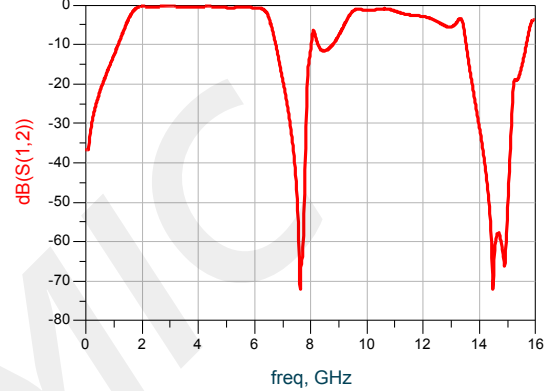
Typical test curve



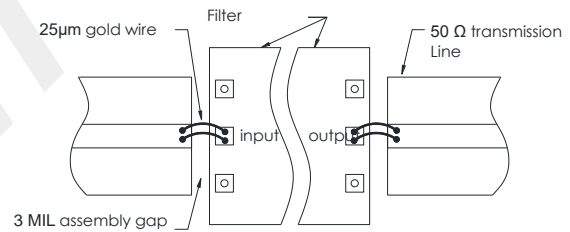
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

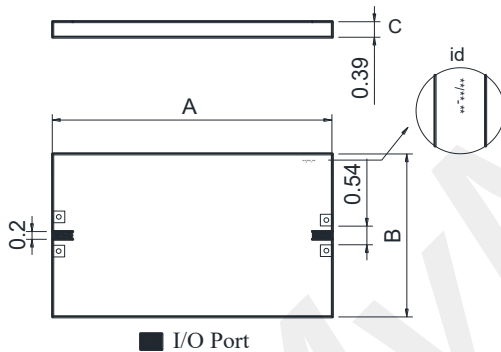
Environmental parameters

Operation temperature	-55°C ~ +85°C
Storage temperature	-55°C ~ +125°C
Max input Power	35dBm

Electrical Specification (T_A = +25°C)

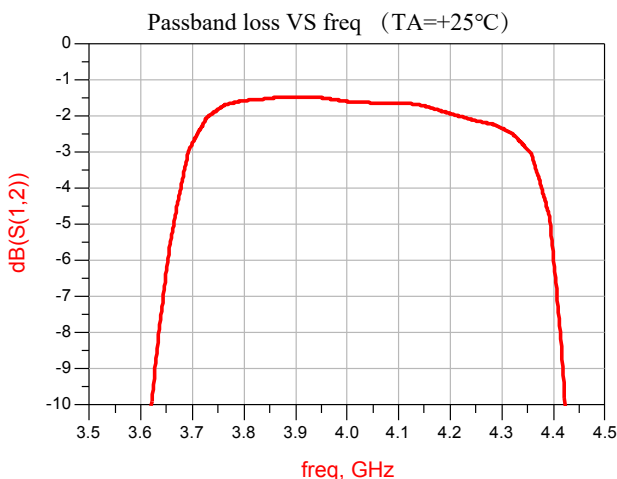
Items	Min	Typ	Max	Unit
Center Freq (f ₀)	-	4.05	-	GHz
Passband freq range	3.8	-	4.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@3.2GHz		-	dB
	≥40@4.6GHz		-	dB

Dimensions

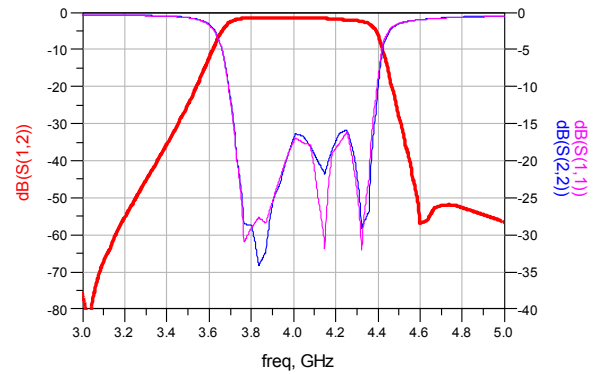


Size symbol	Value (mm)		
	Min	Nominal	Max
A	7.9	-	8
B	6.5	-	6.6

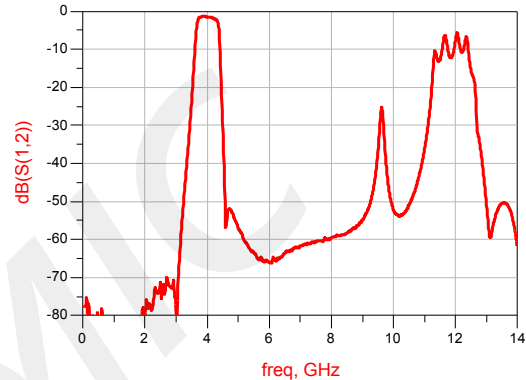
Typical test curve



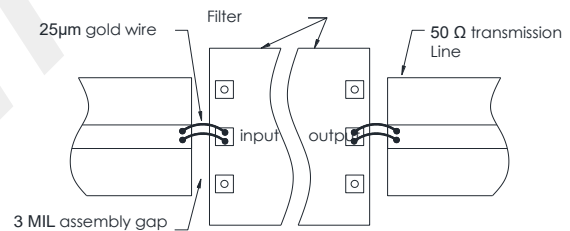
Out-of-band rejection & return loss VS freq (T_A = +25°C)2



Remote suppression VS freq (T_A = +25°C)



Recommend assembly drawing



Notes

1. The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
2. The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
3. The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
4. When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

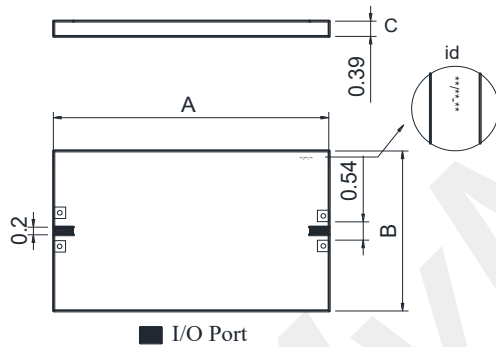
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

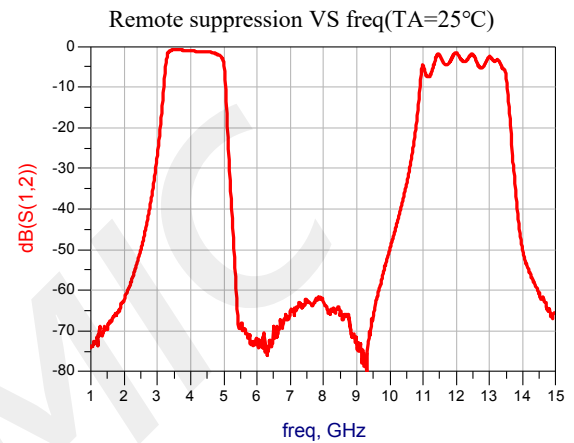
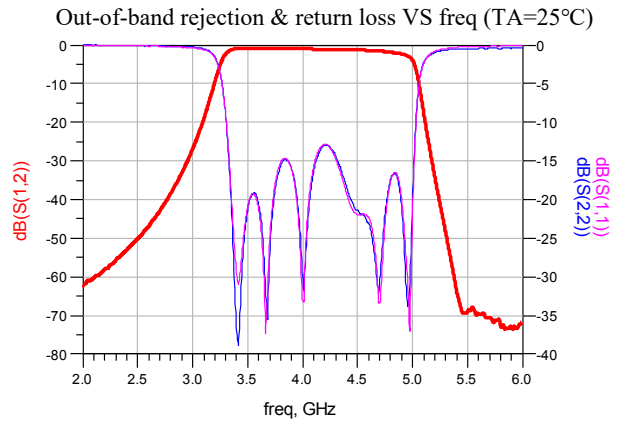
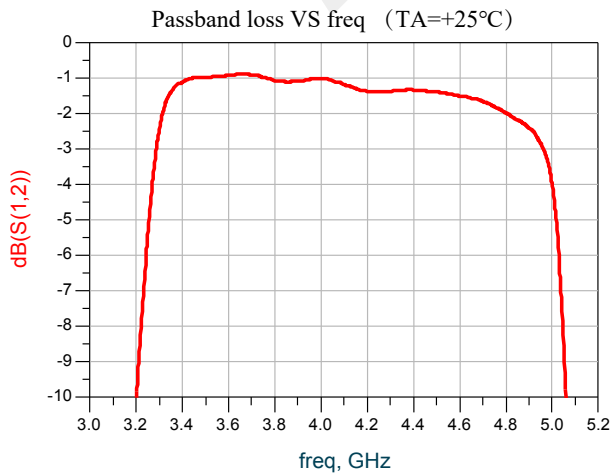
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.05	-	GHz
Passband freq range	3.4	-	4.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@2.65GHz			dB
	≥40@5.3GHz			dB

Dimensions

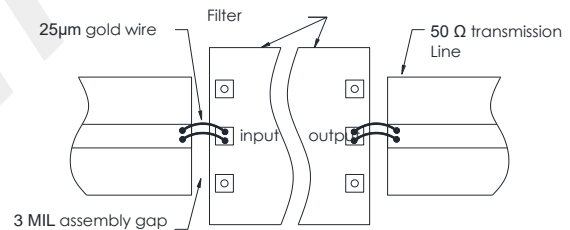


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.9	-	6

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

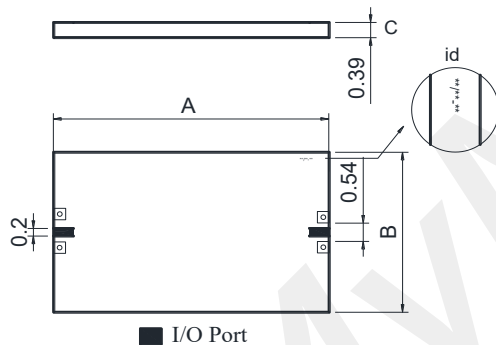
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

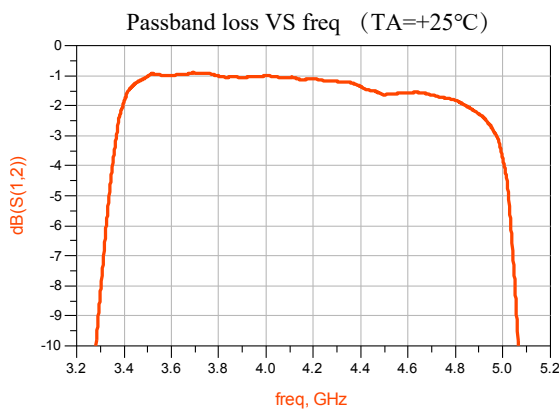
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.1	-	GHz
Passband freq range	3.45	-	4.75	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@2.8GHz			dB
	≥40@5.25GHz			dB

Dimensions

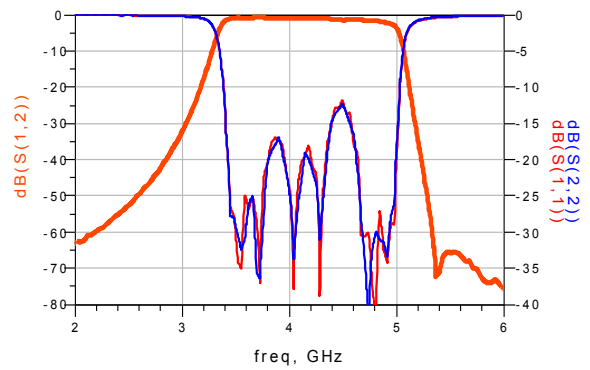


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.9	-	6

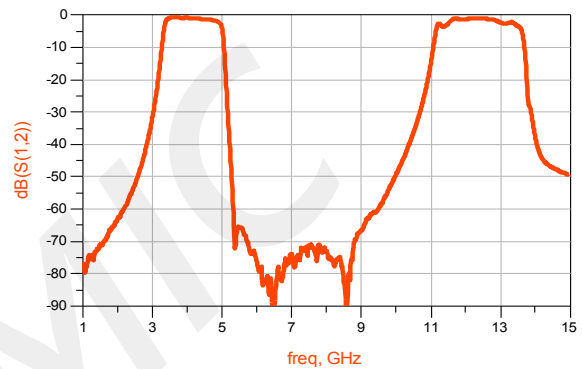
Typical test curve



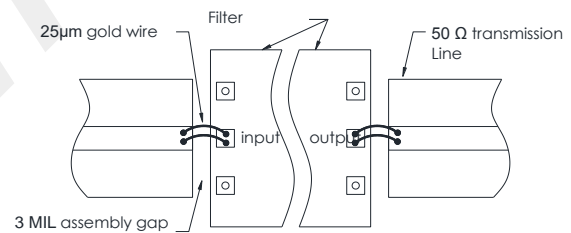
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

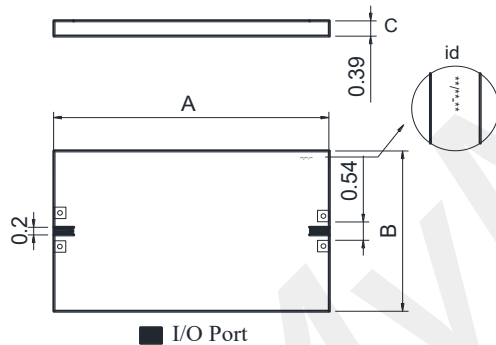
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

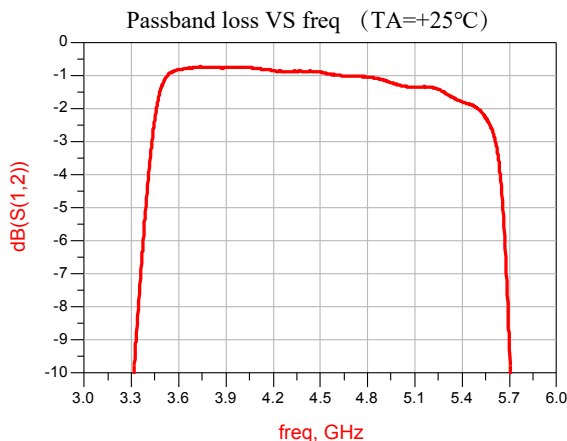
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

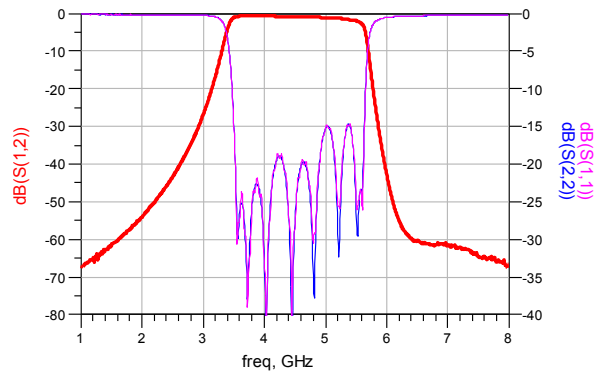
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.4	-	GHz
Passband freq range	3.55	-	5.25	GHz
In-band ripple	-	-	1	dB
Center insertion loss		1.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@2.2GHz			dB
	≥40@6.2GHz			dB

Dimensions


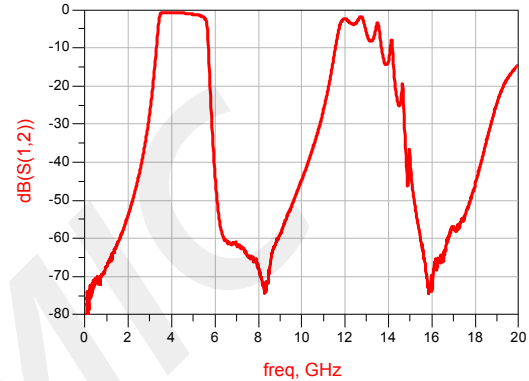
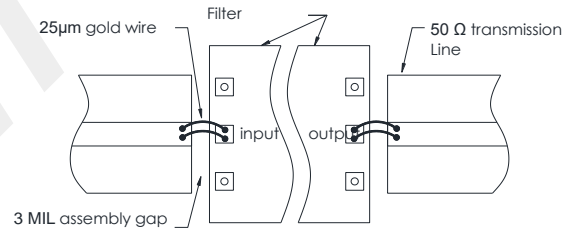
Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	7.6	-	7.7

Typical test curve


Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)


Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

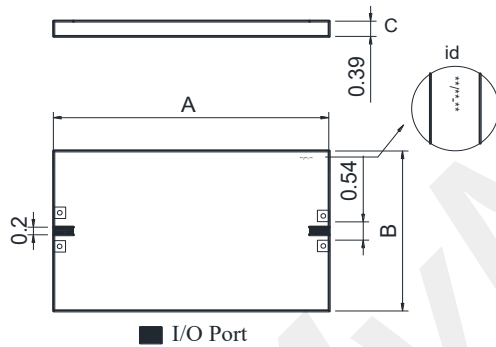
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

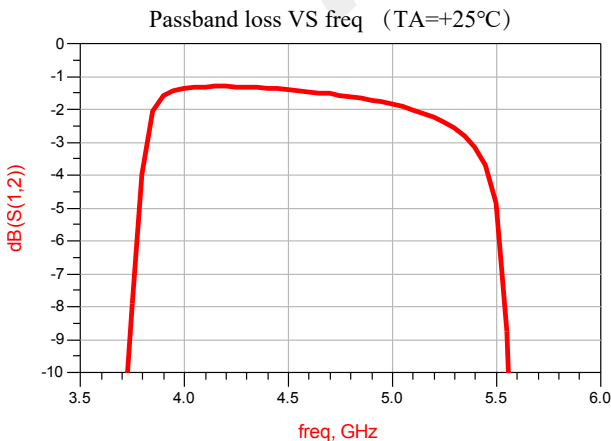
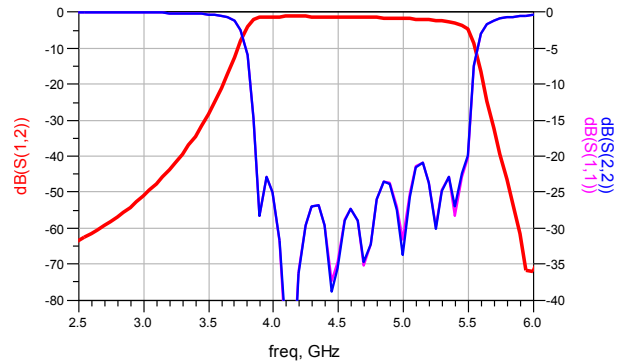
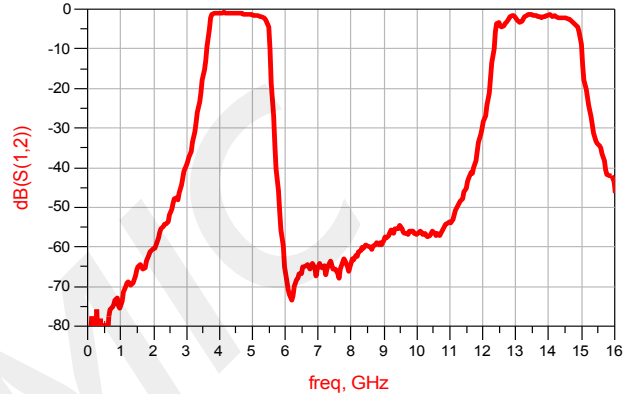
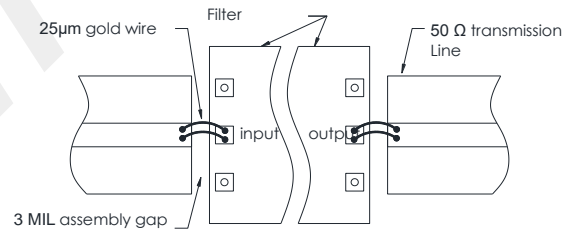
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.5	-	GHz
Passband freq range	3.9	-	5.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@3.2GHz			dB
	≥40@5.8GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.1	-	5.2

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

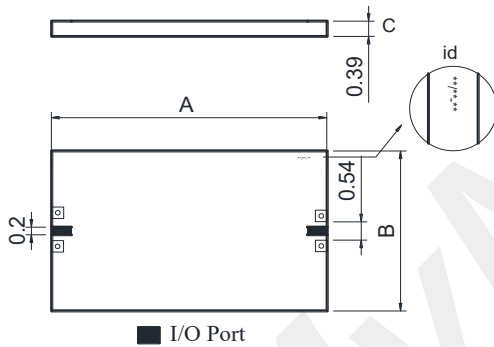
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

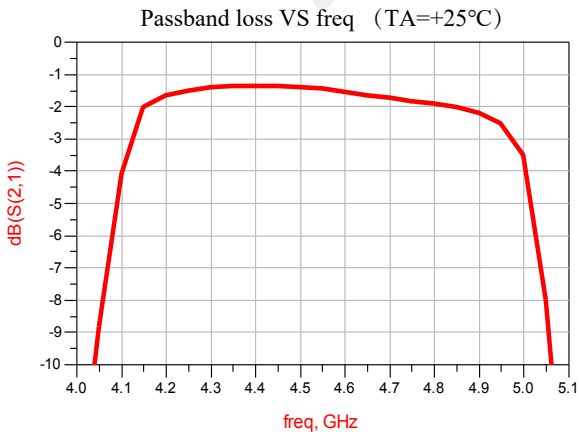
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.55	-	GHz
Passband freq range	4.2	-	4.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@3.7GHz			dB
	≥40@5.3GHz			dB

Dimensions

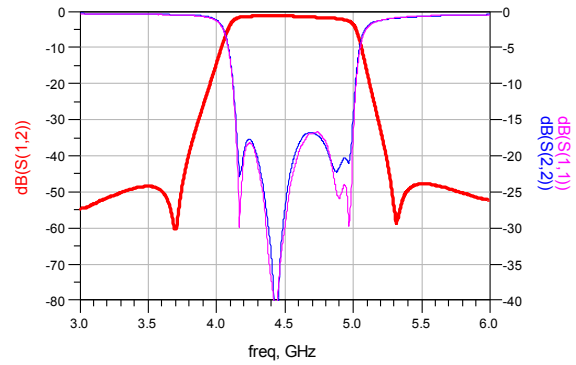


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.6	-	5.7

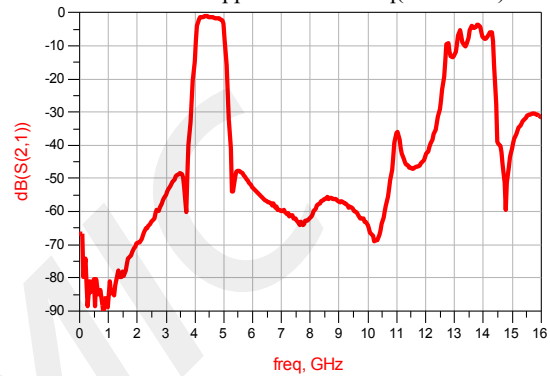
Typical test curve



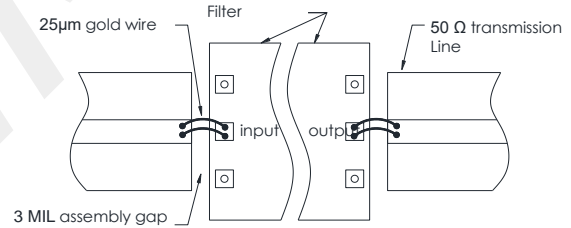
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

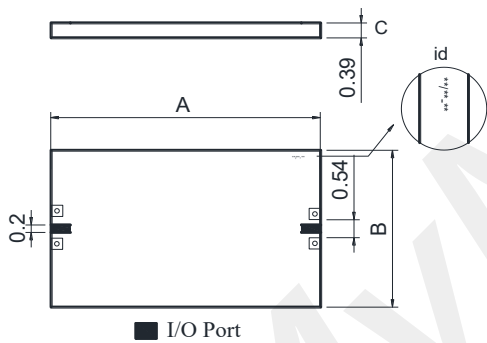
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

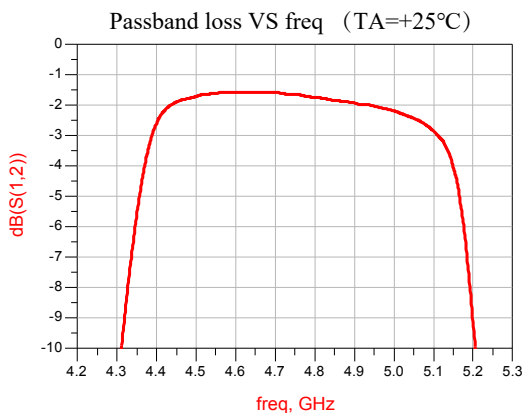
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.72	-	GHz
Passband freq range	4.44	-	5.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	19	-	dB
Out-of-band atten	≥40@3.95GHz		-	dB
	≥40@5.45GHz		-	dB

Dimensions

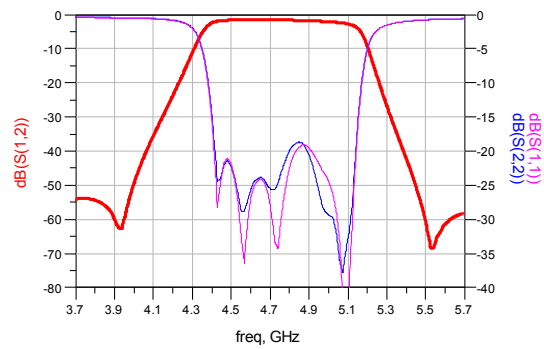


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.9	-	6.0

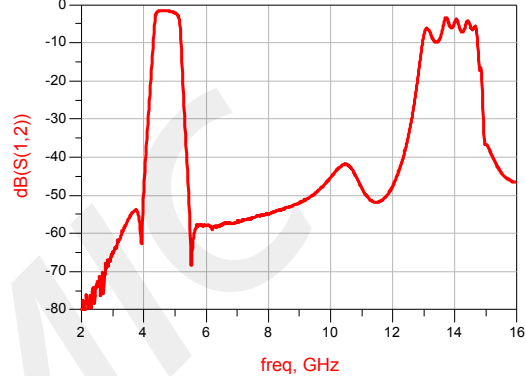
Typical test curve



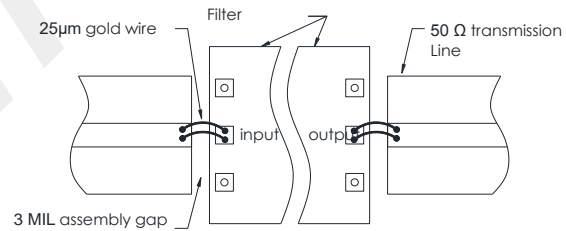
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

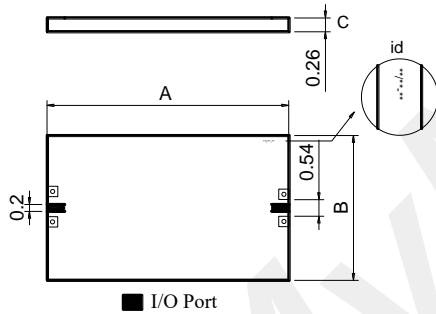
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

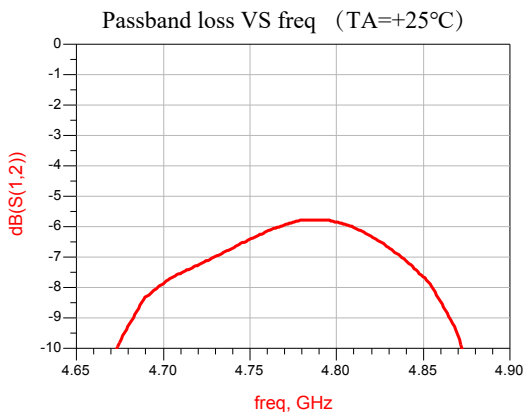
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	4.79	-	GHz
Passband freq range	4.78	-	4.80	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	6.5	-	dB
Return loss	-	10	-	dB
Out-of-band atten	≥40@4.5GHz		-	dB
	≥40@5.05GHz		-	dB

Dimensions

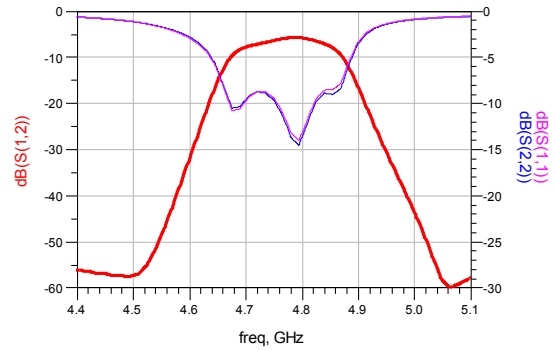


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	6.2	-	6.3

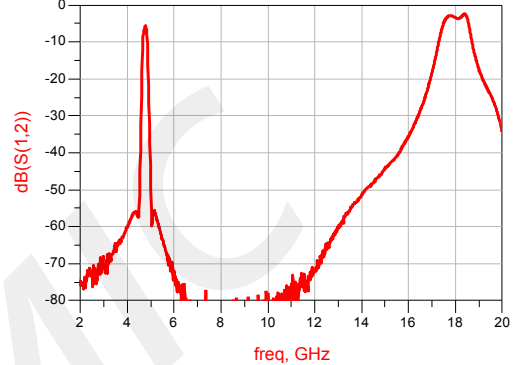
Typical test curve



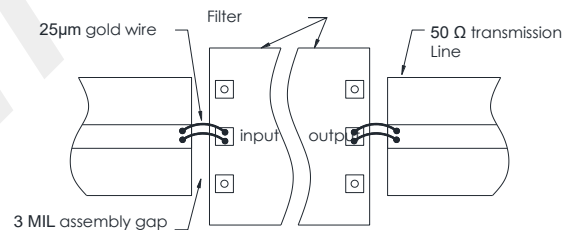
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

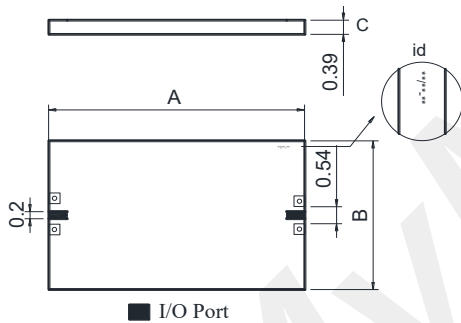
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

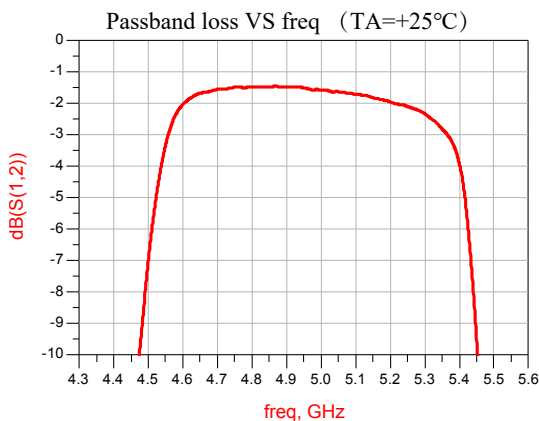
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.95	-	GHz
Passband freq range	4.6	-	5.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	21	-	dB
Out-of-band atten	≥40@4.15GHz		-	dB
	≥40@5.75GHz		-	dB

Dimensions

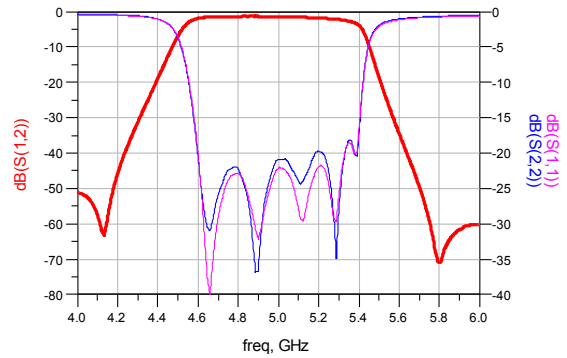


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	5.4	-	5.5

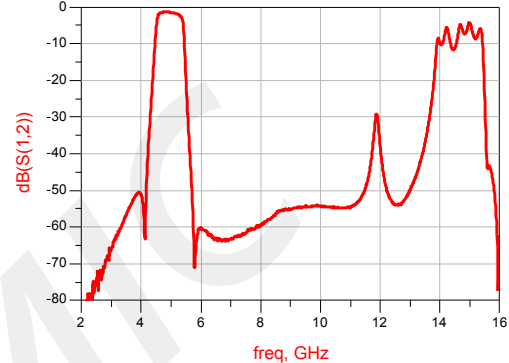
Typical test curve



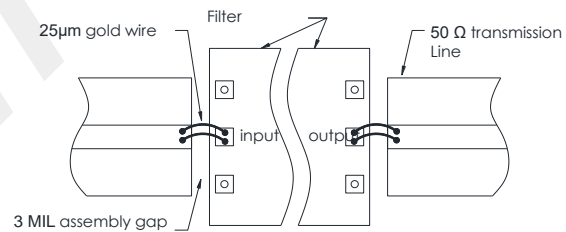
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

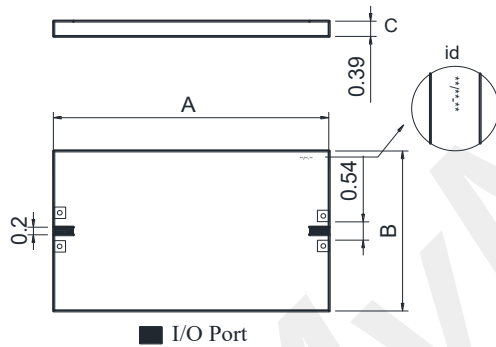
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

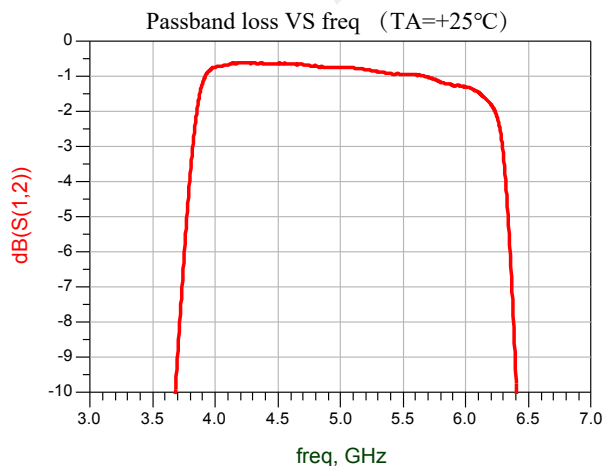
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	4.95	-	GHz
Passband freq range	3.9	-	6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@2.6GHz		-	dB
	≥40@7.1GHz		-	dB

Dimensions

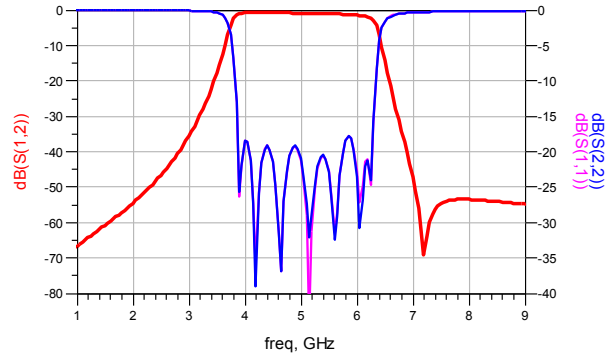


Size symbol:	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.7	-	4.8

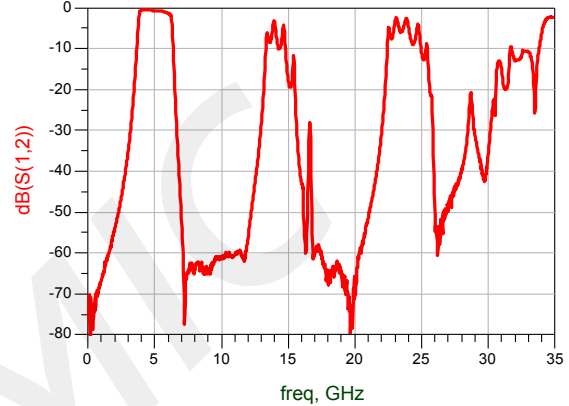
Typical test curve



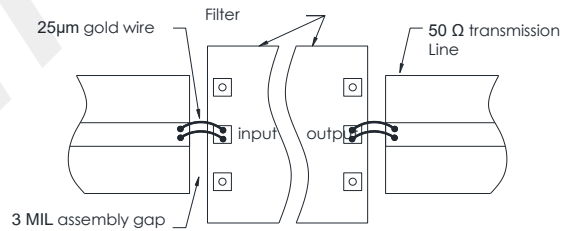
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

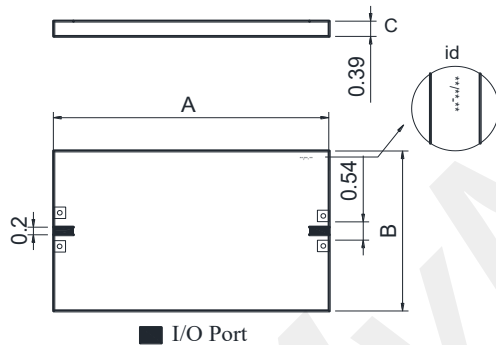
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification (T_A=+25°C)

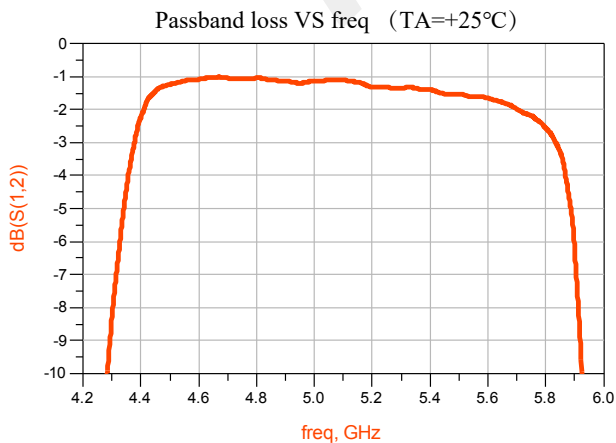
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5	-	GHz
Passband freq range	4.45	-	5.65	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@3.7GHz			dB
	≥40@6.2GHz			dB

Dimensions

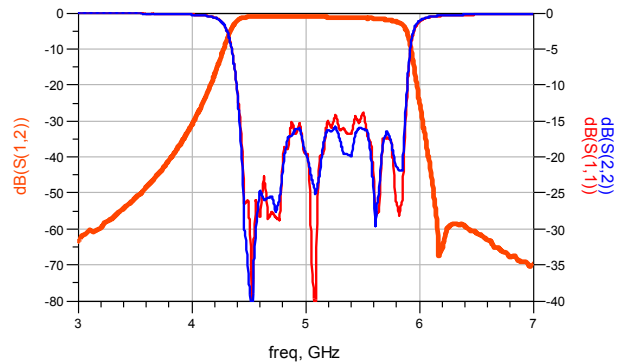


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.2	-	5.3

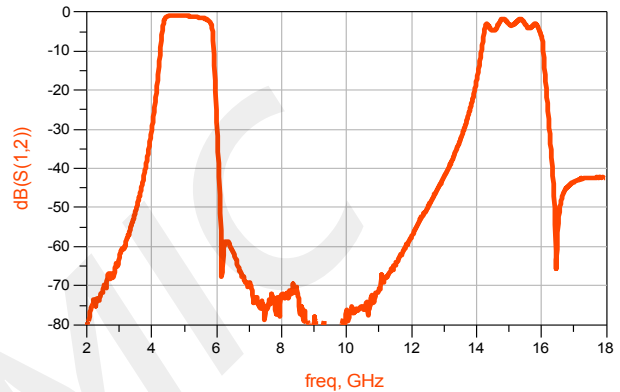
Typical test curve



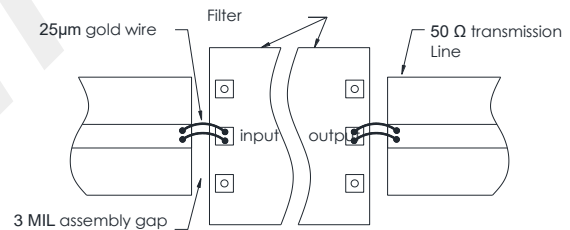
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq (TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

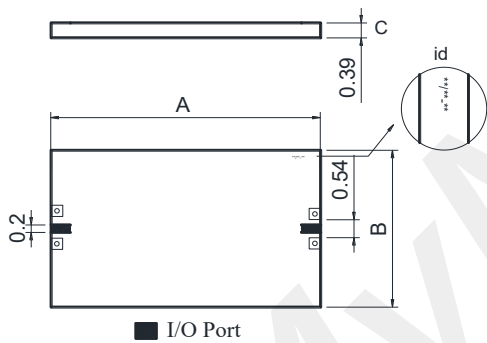
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

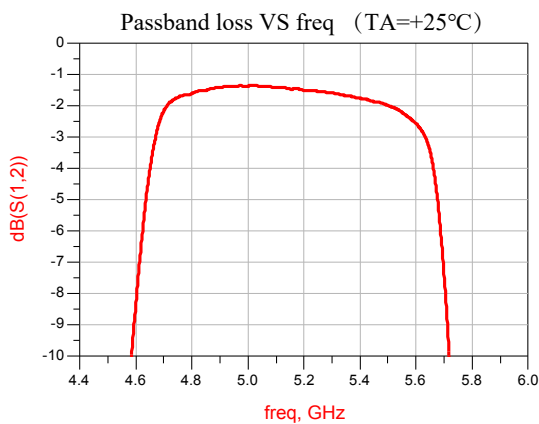
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.1	-	GHz
Passband freq range	4.7	-	5.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@4.2GHz		-	dB
	≥40@6.05GHz		-	dB

Dimensions

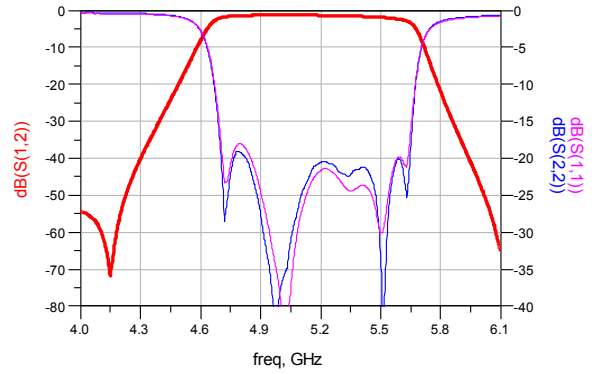


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	5.4	-	5.5

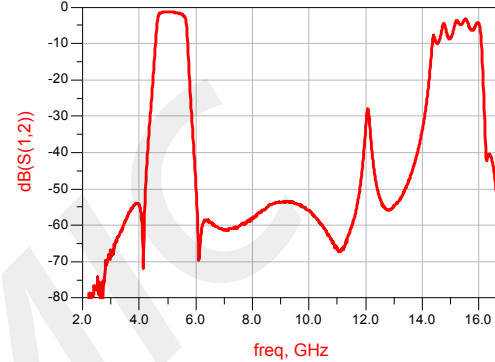
Typical test curve



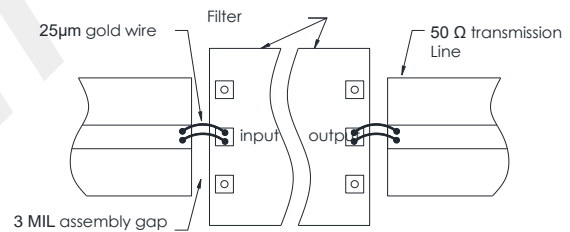
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

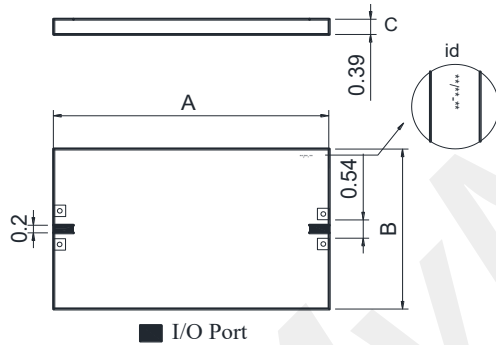
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

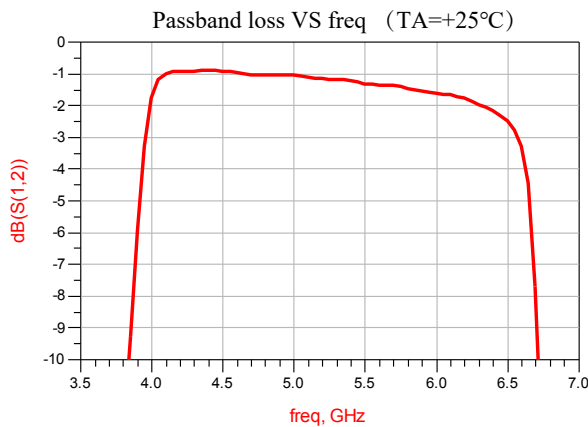
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.1	-	GHz
Passband freq range	4	-	6.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@3.0GHz			dB
	≥40@7.1GHz			dB

Dimensions

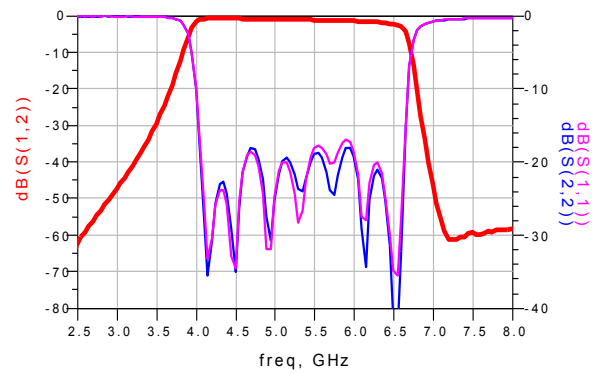


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	7.2	-	7.3

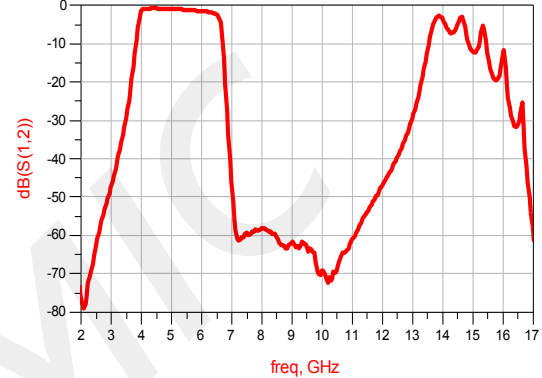
Typical test curve



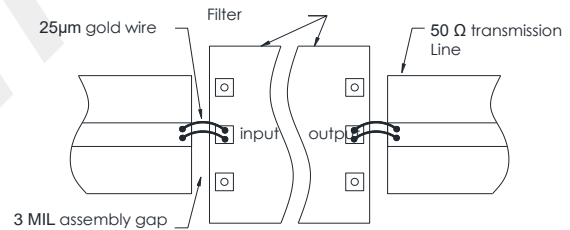
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

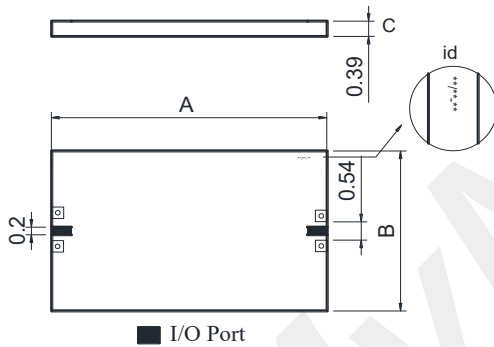
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

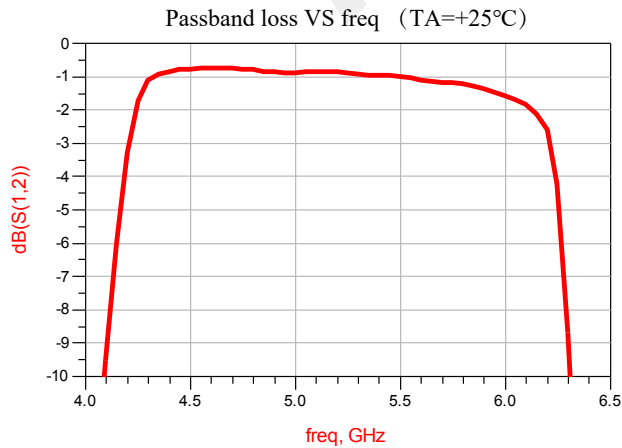
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.15	-	GHz
Passband freq range	4.3	-	6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@3.3GHz			dB
	≥40@6.7GHz			dB

Dimensions

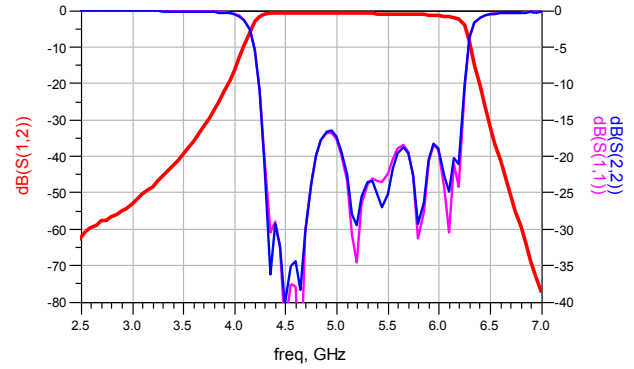


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.2	-	5.3

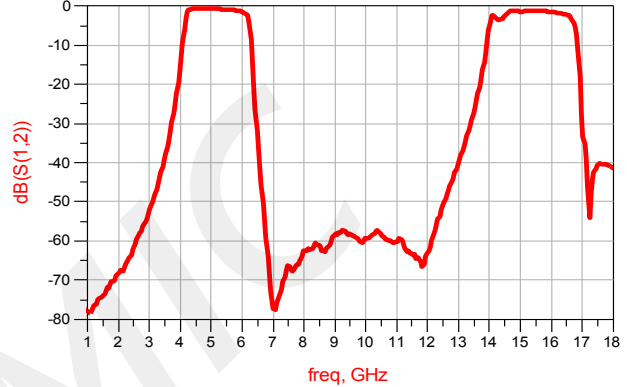
Typical test curve



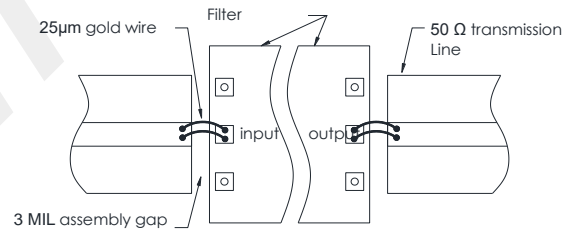
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

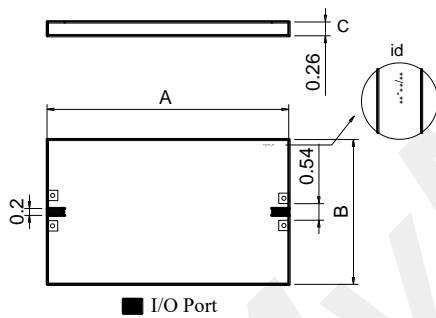
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

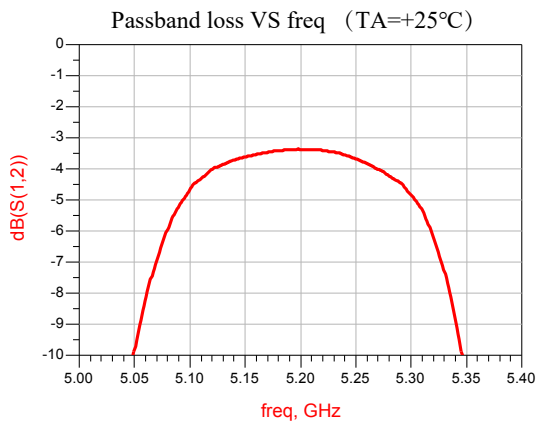
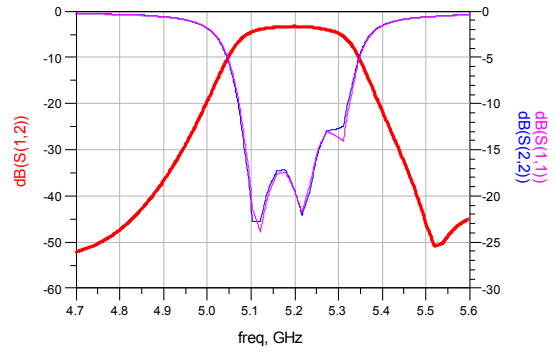
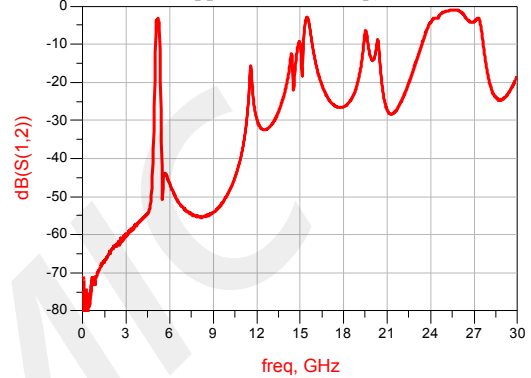
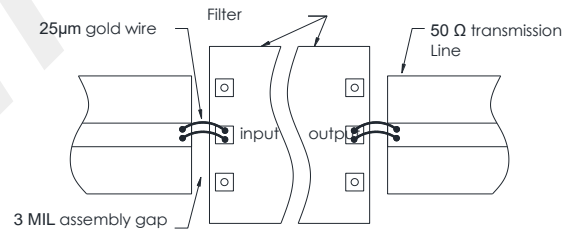
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.2	-	GHz
Passband freq range	5.15	-	5.25	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4.0	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@4.75GHz		-	dB
	≥40@5.55GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6.0
B	6.4	-	6.5

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

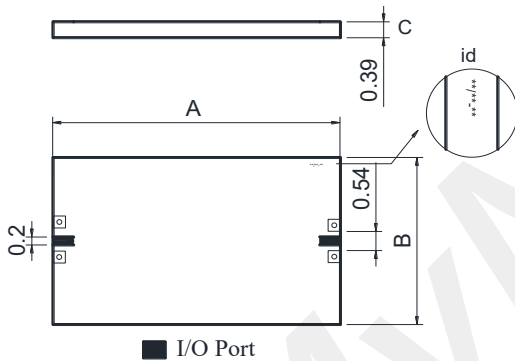
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

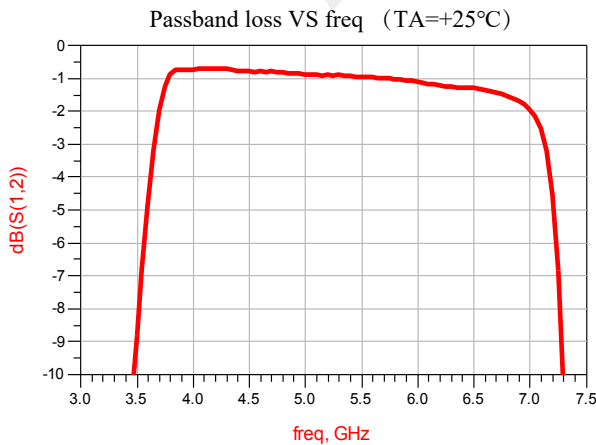
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.35	-	GHz
Passband freq range	3.8	-	6.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.3	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@2.0GHz			dB
	≥40@7.85GHz			dB

Dimensions

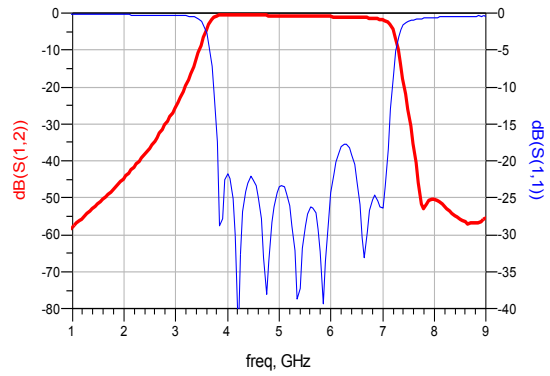


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	6.4	-	6.5

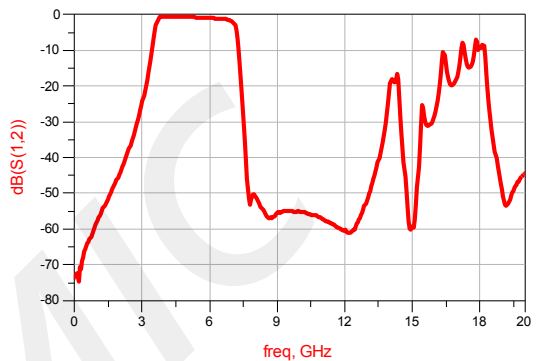
Typical test curve



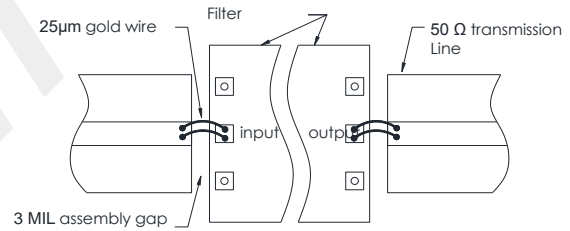
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

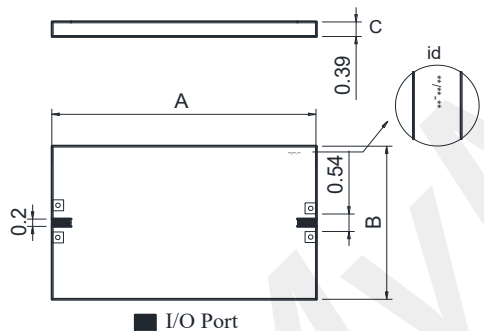
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

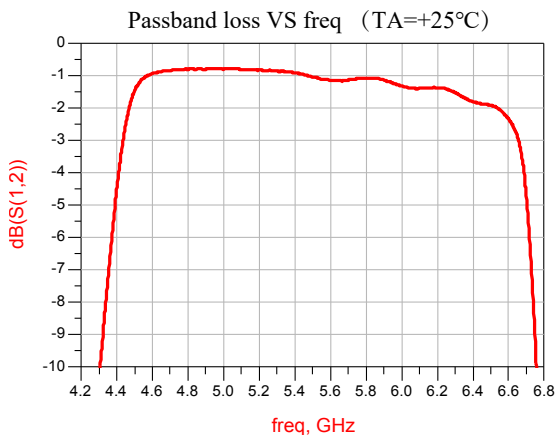
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.35	-	GHz
Passband freq range	4.5	-	6.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@3.0GHz		-	dB
	≥40@7.5GHz		-	dB

Dimensions

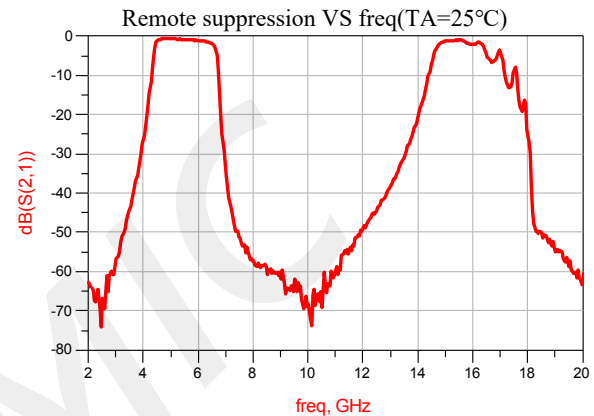
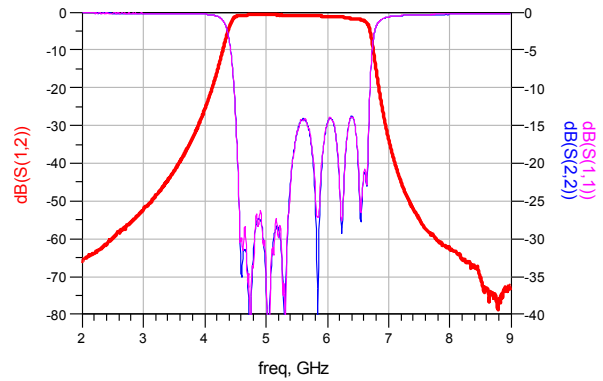


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	6.3	-	6.4

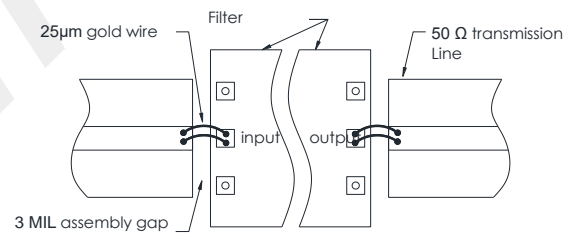
Typical test curve



Out-of-band rejection & return loss VS freq (TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

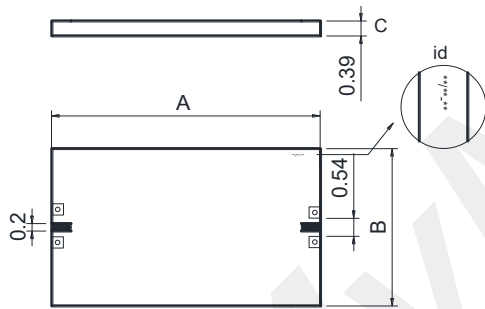
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	5.45	-	GHz
Passband freq range	5.1	-	5.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@3.2GHz		-	dB
	≥40@6.4GHz		-	dB

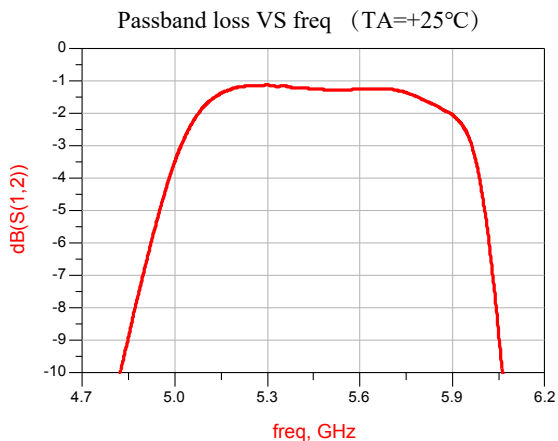
Dimensions



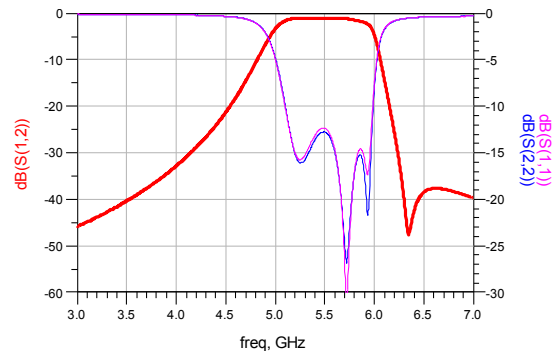
■ I/O Port

Size symbol	Value(mm)		
	Min	Nominal	Max
A	3.9	-	4.0
B	3.9	-	4.0

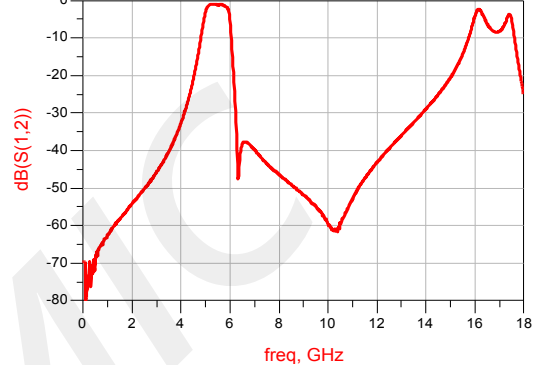
Typical test curve



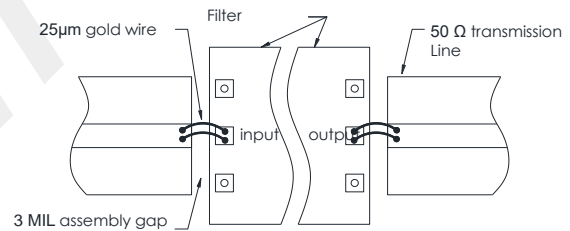
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

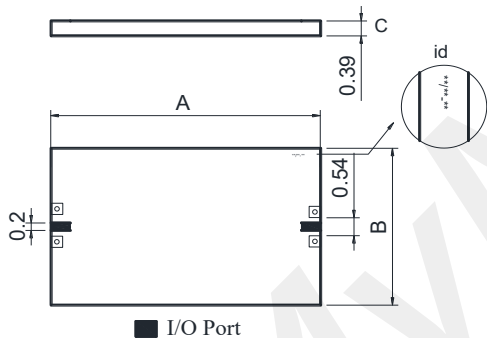
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

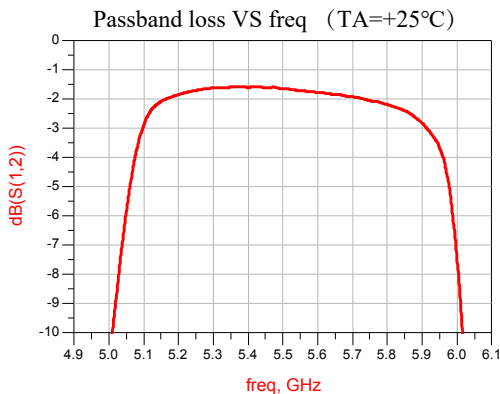
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.5	-	GHz
Passband freq range	5.2	-	5.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@4.6GHz		-	dB
	≥40@6.3GHz		-	dB

Dimensions

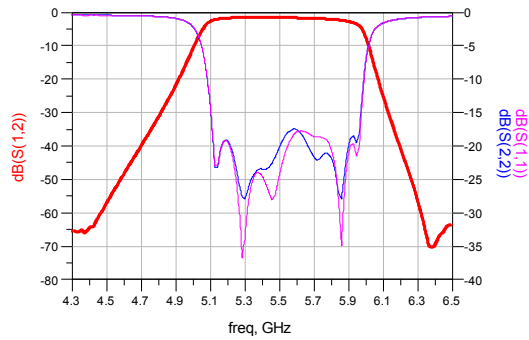


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.3	-	5.4

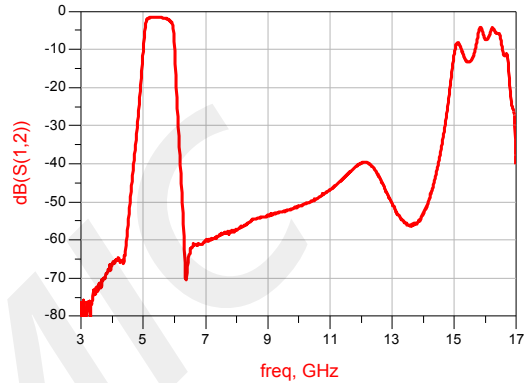
Typical test curve



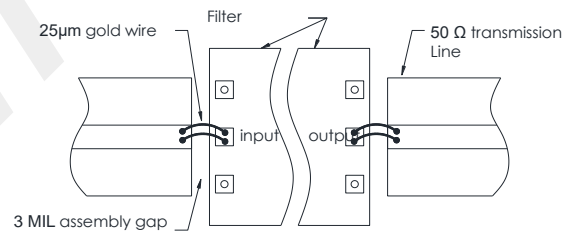
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

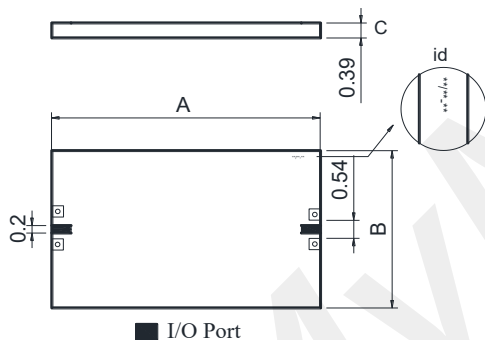
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

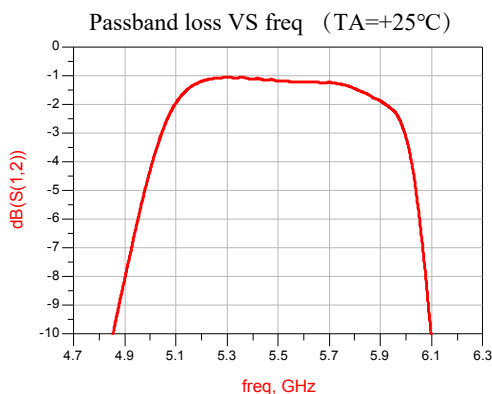
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	5.5	-	GHz
Passband freq range	5.15	-	5.85	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@3.3GHz		-	dB
	≥40@6.4GHz		-	dB

Dimensions

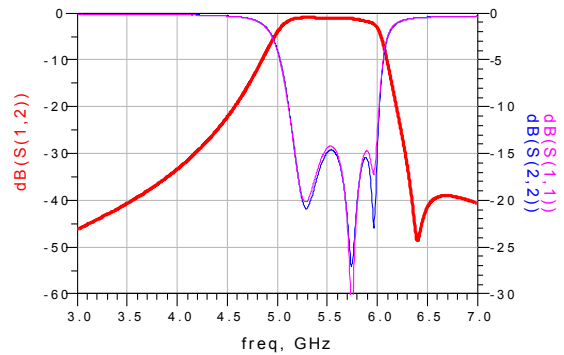


Size symbol	Value(mm)		
	Min	Nominal	Max
A	3.9	-	4.0
B	3.9	-	4.0

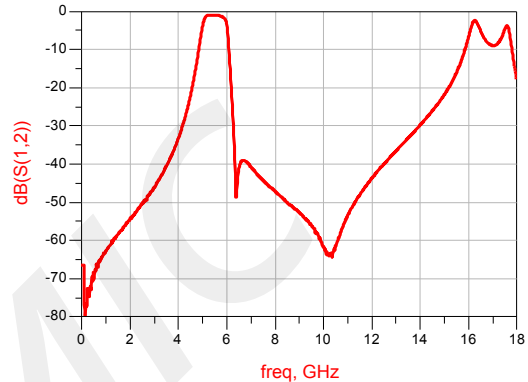
Typical test curve



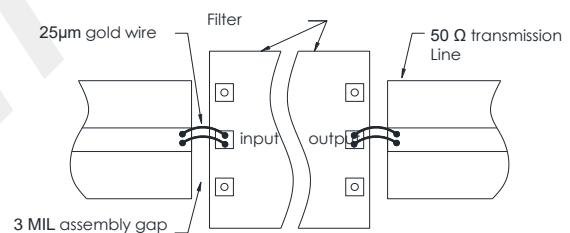
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

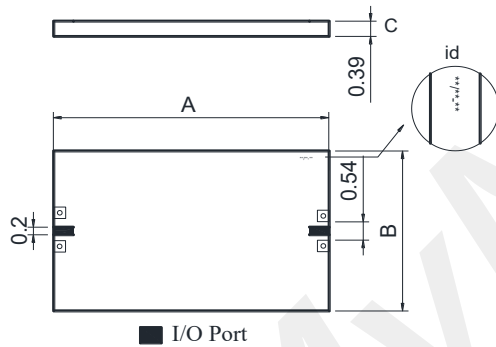
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

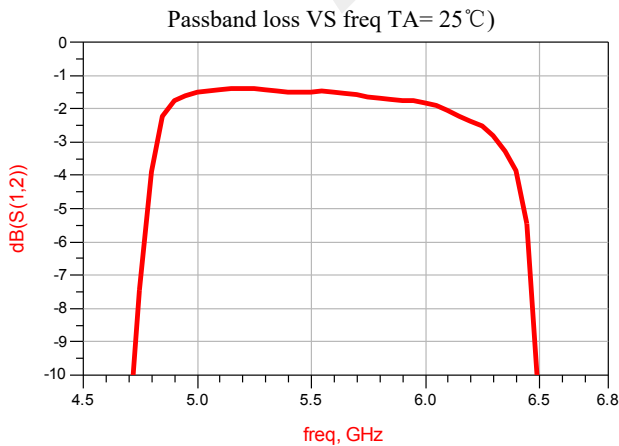
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.5	-	GHz
Passband freq range	4.9	-	6.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@4.0GHz		-	dB
	≥40@6.8GHz		-	dB

Dimensions

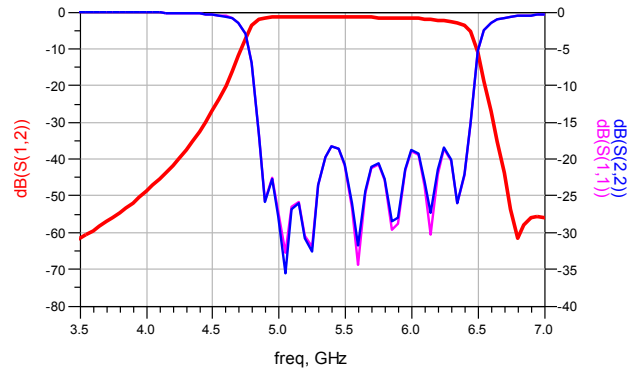


Size symbol:	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	4.3	-	4.4

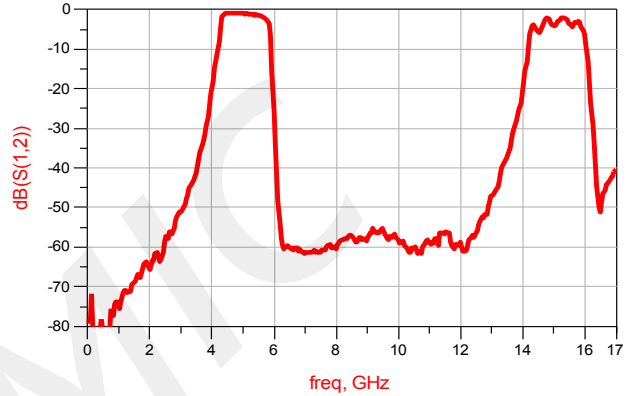
Typical test curve



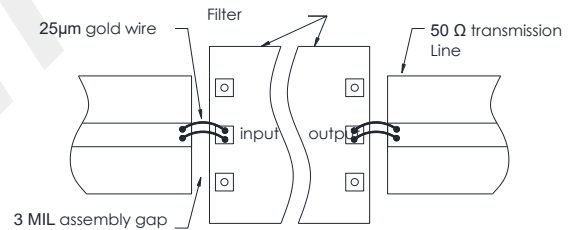
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

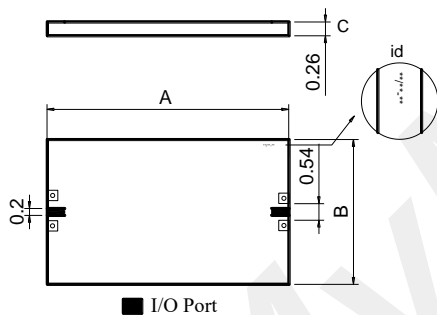
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

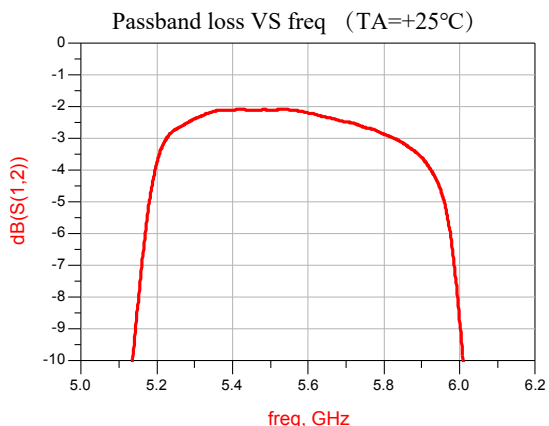
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	5.52	-	GHz
Passband freq range	5.28	-	5.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@4.8GHz		-	dB
	≥40@6.3GHz		-	dB

Dimensions

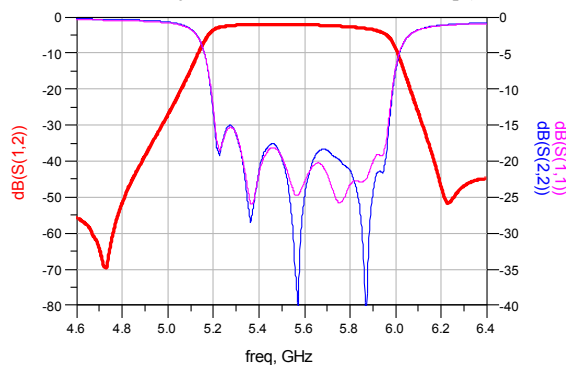


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	7.4	-	7.5

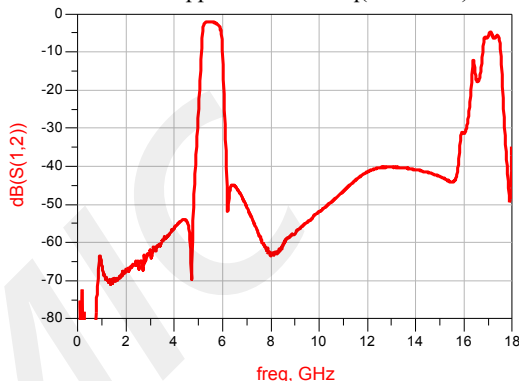
Typical test curve



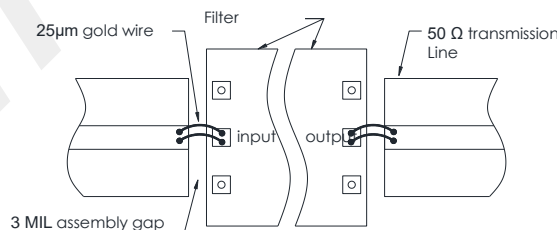
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

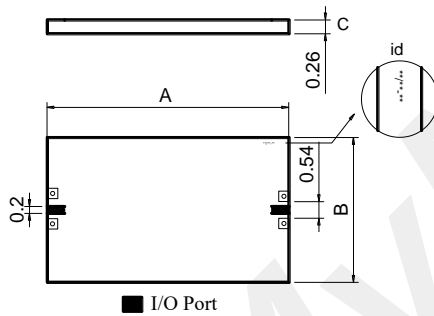
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

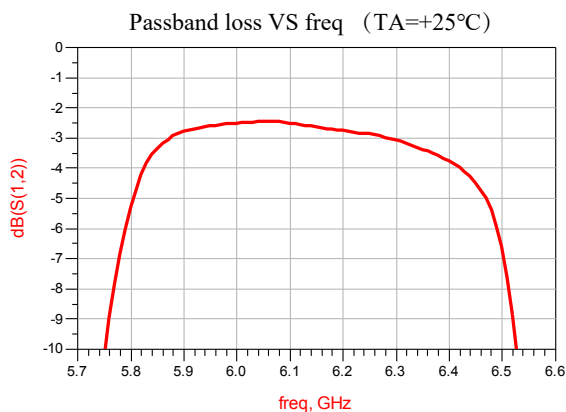
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	6.1	-	GHz
Passband freq range	5.9	-	6.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@5.4GHz		-	dB
	≥40@6.8GHz		-	dB

Dimensions

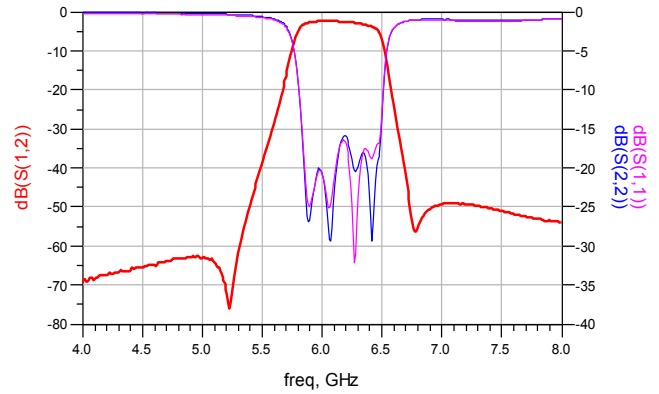


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	6.8	-	6.9

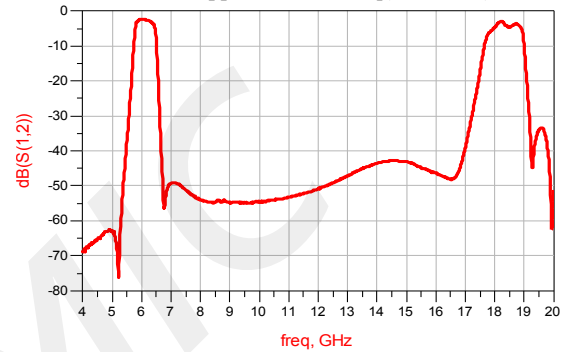
Typical test curve



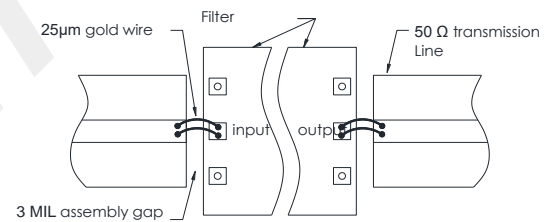
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

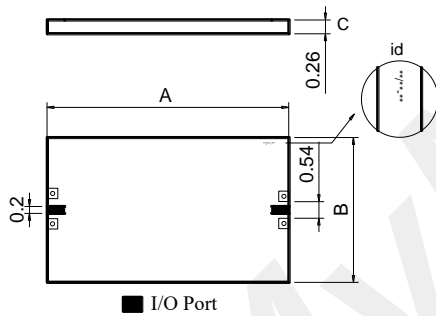
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

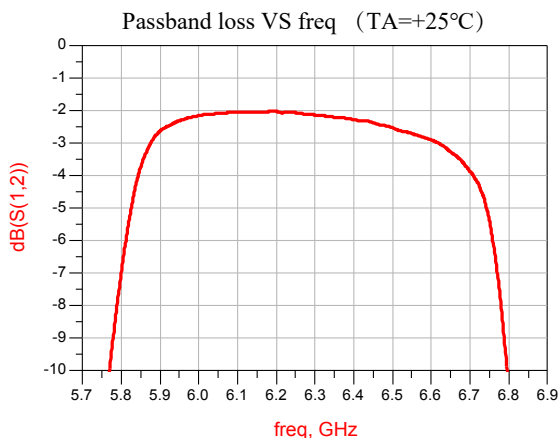
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.25	-	GHz
Passband freq range	5.92	-	6.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@5.3GHz		-	dB
	≥40@7.15GHz		-	dB

Dimensions

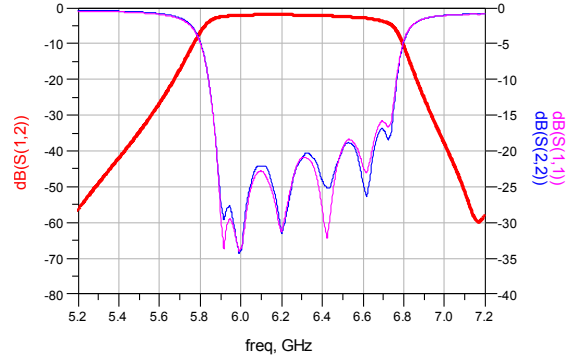


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	6.6	-	6.7

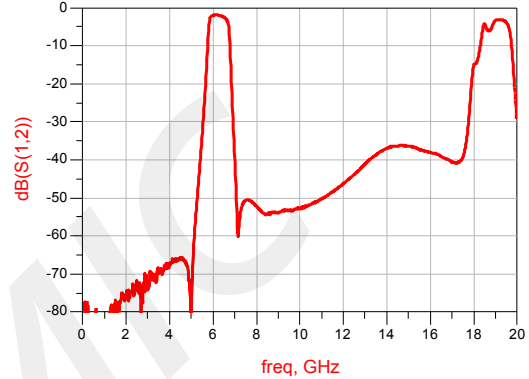
Typical test curve



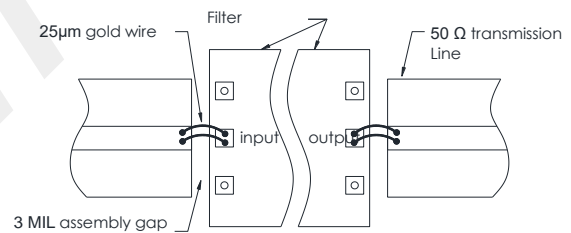
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

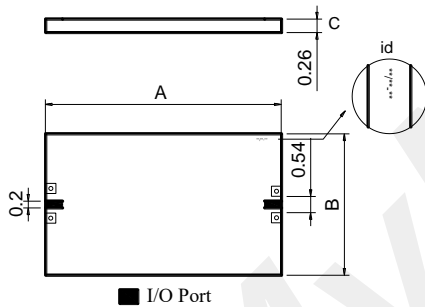
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.3	-	GHz
Passband freq range	5.8	-	6.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band	atten		≥40@4.4GHz	dB
			≥40@7.6GHz	dB

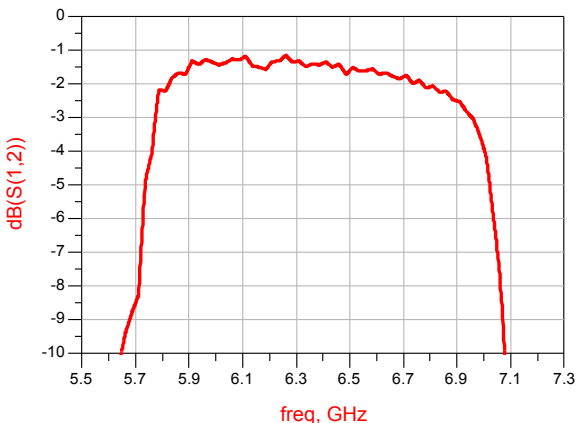
Dimensions



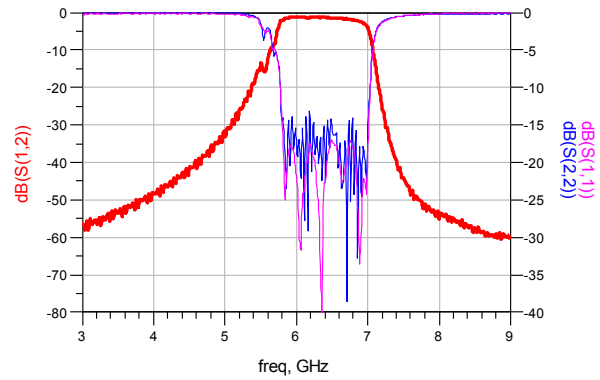
Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	5.4	-	5.5

Typical test curve

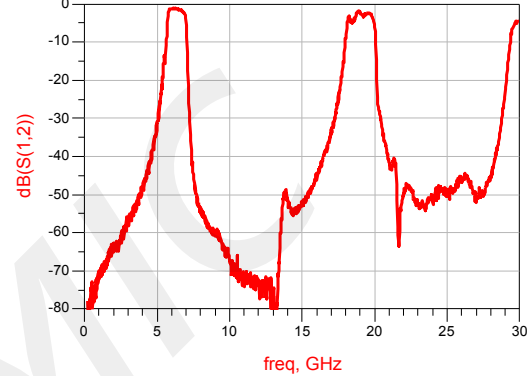
Passband loss VS freq TA=25°C)



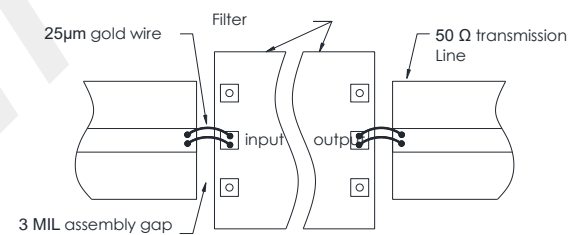
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

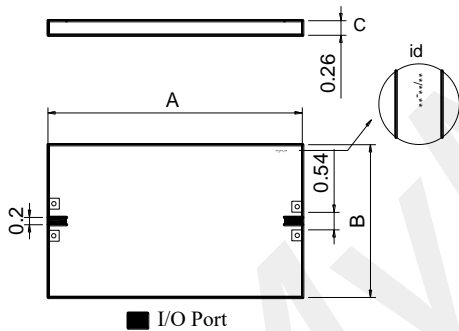
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

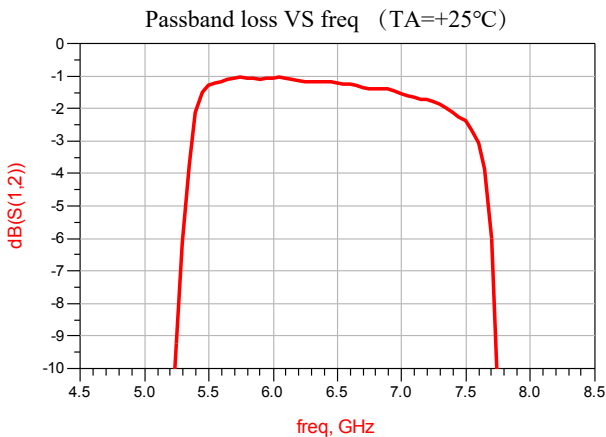
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.3	-	GHz
Passband freq range	5.5	-	7.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@4.3GHz		-	dB
	≥40@8.2GHz		-	dB

Dimensions

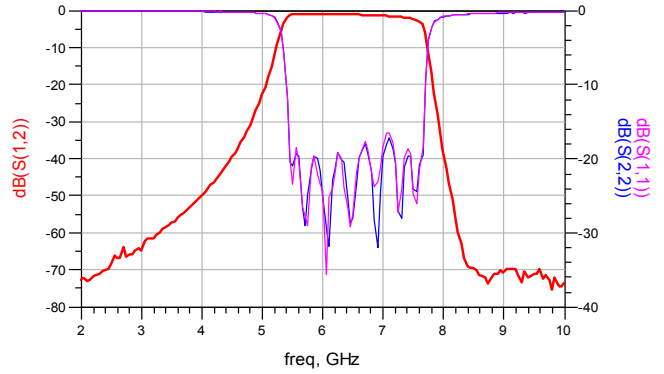


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.2	-	5.3

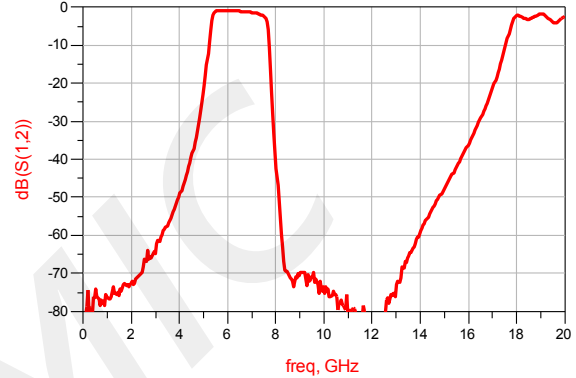
Typical test curve



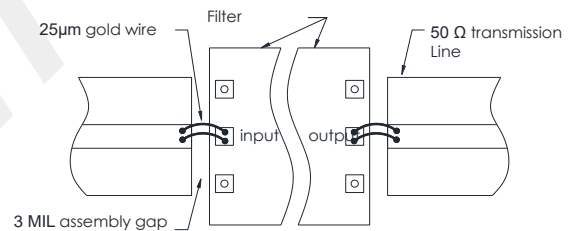
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

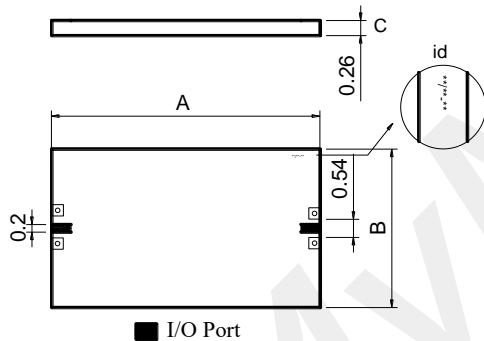
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.37	-	GHz
Passband freq range	6.24	-	6.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@5.8GHz		-	dB
	≥40@6.95GHz		-	dB

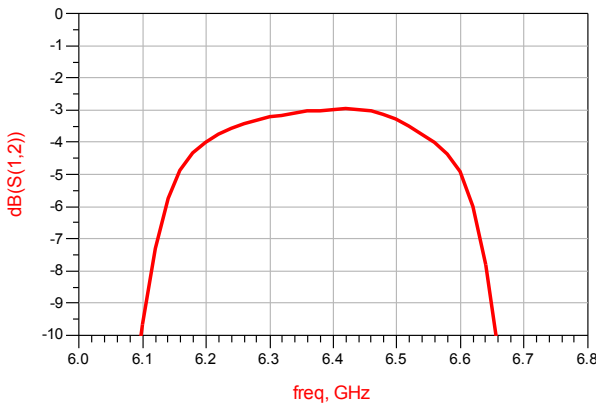
Dimensions



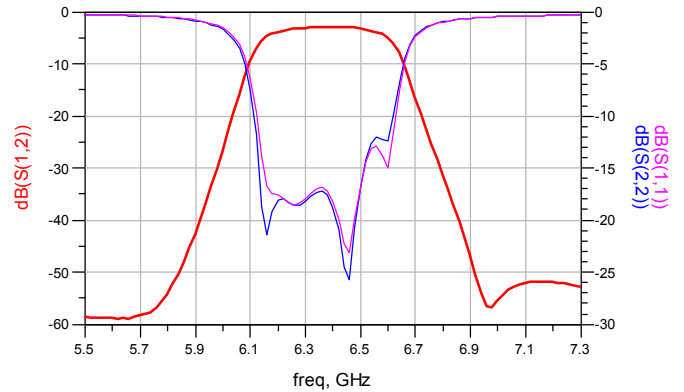
Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	5.9	-	6.0

Typical test curve

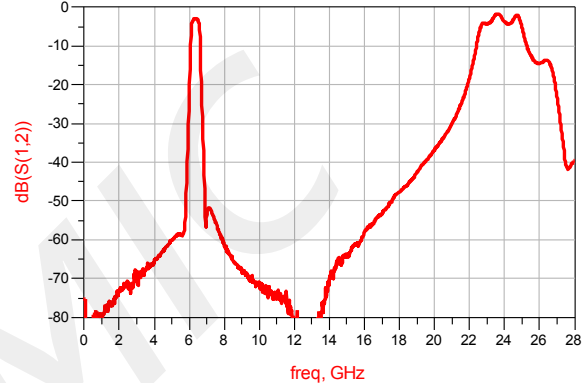
Passband loss VS freq (T_A=+25°C)



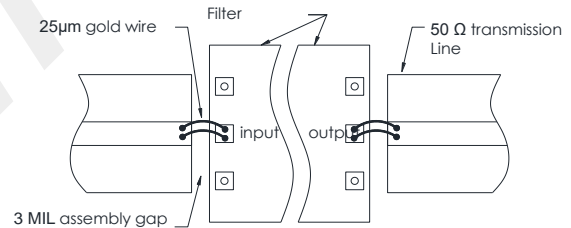
Out-of-band rejection & return loss VS freq (T_A=25°C)



Remote suppression VS freq(T_A=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
<p>Dimensions: 0.25, 1.84, 0.43, 0.63, 0.78</p>	<p>Dimensions: 0.29, 1.3, 0.31, 0.66, 0.55</p>
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

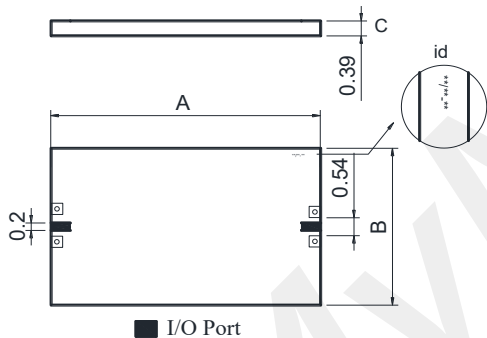
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

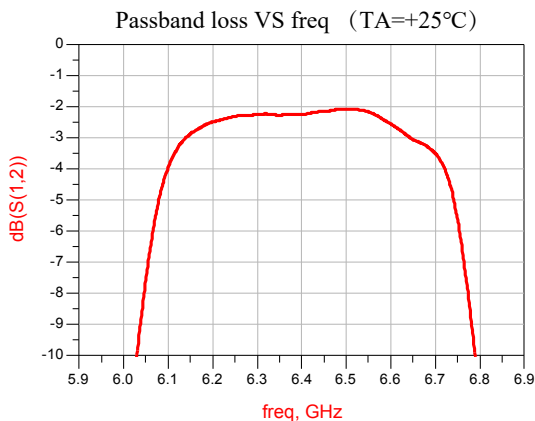
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.4	-	GHz
Passband freq range	6.2	-	6.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@5.7GHz		-	dB
	≥40@7.1GHz		-	dB

Dimensions

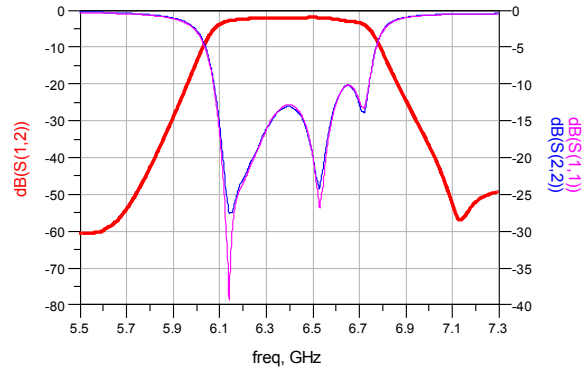


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	3.4	-	3.5

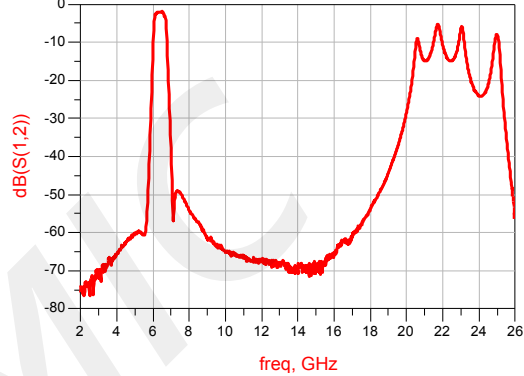
Typical test curve



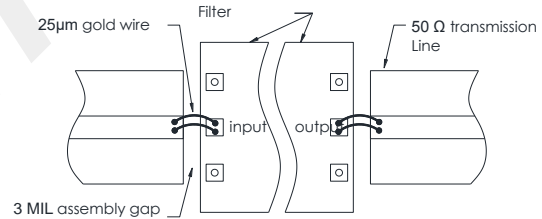
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

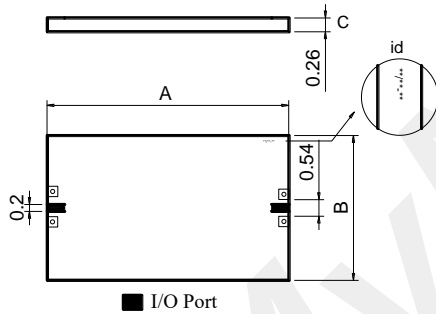
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

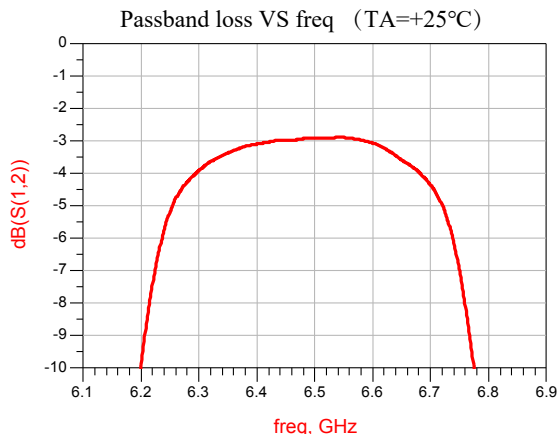
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.49	-	GHz
Passband freq range	6.32	-	6.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@5.9GHz		-	dB
	≥40@7.1GHz		-	dB

Dimensions

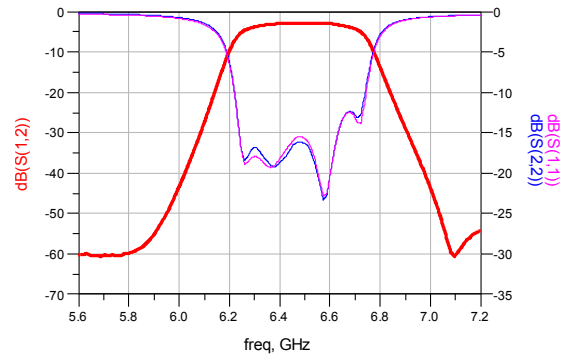


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.4	-	6.5
B	4.7	-	4.8

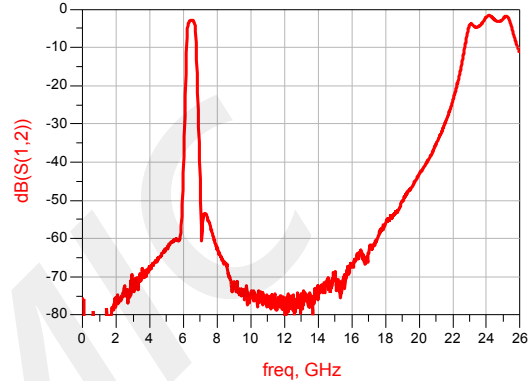
Typical test curve



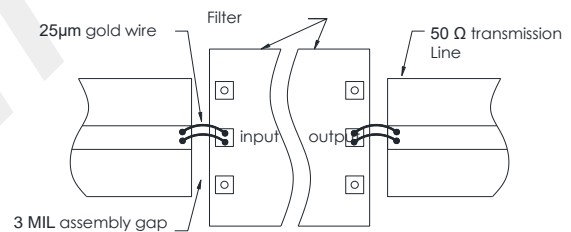
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

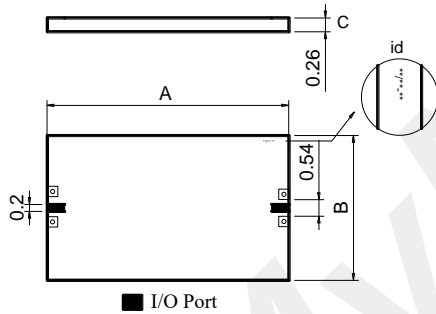
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

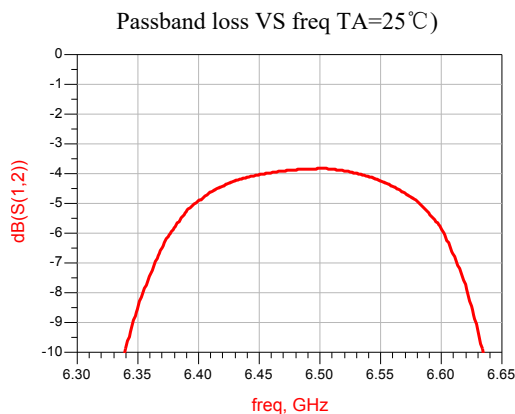
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.5	-	GHz
Passband freq range	6.45	-	6.55	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@6.05GHz		-	dB
	≥40@6.9GHz		-	dB

Dimensions

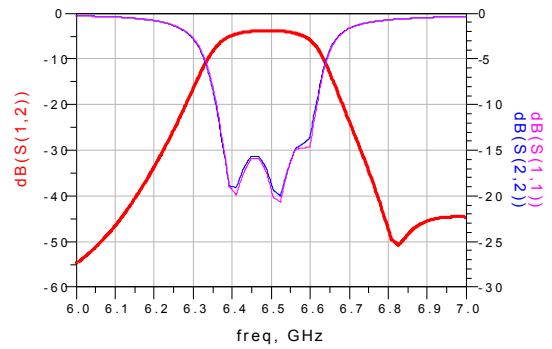


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6.0
B	5.4	-	5.5

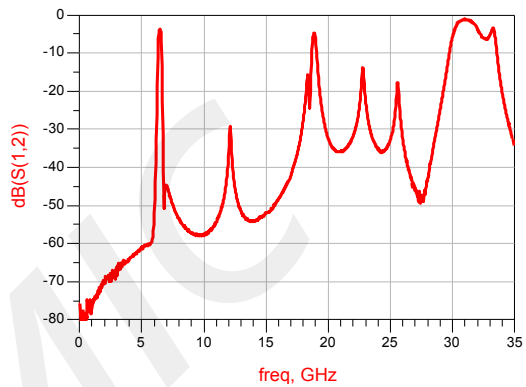
Typical test curve



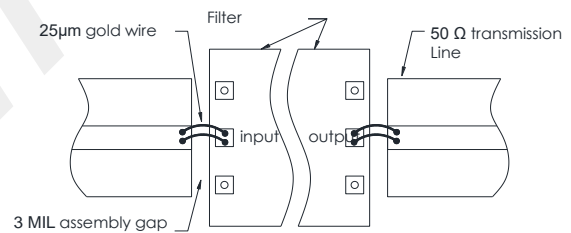
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

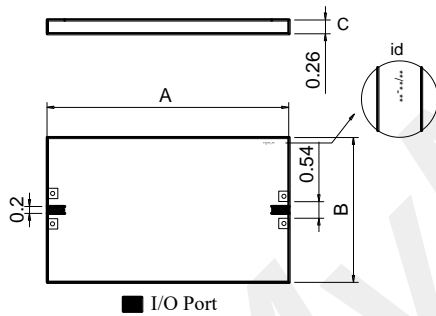
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

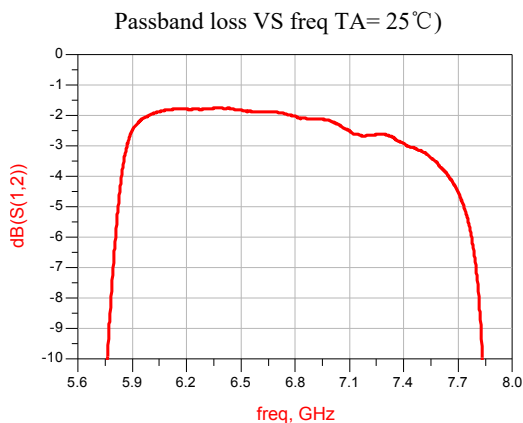
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.5	-	GHz
Passband freq range	5.9	-	7.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@5.2GHz		-	dB
	≥40@8.1GHz		-	dB

Dimensions

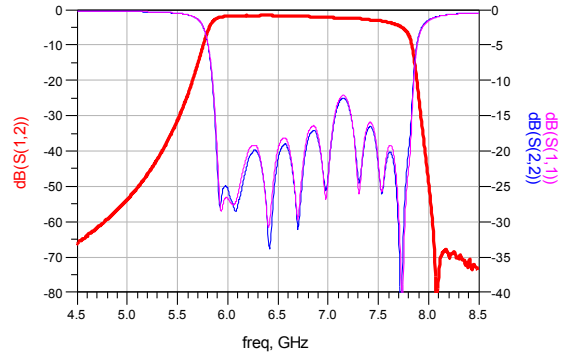


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.1	-	5.2

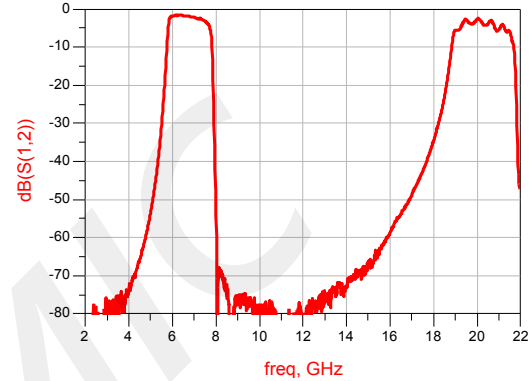
Typical test curve



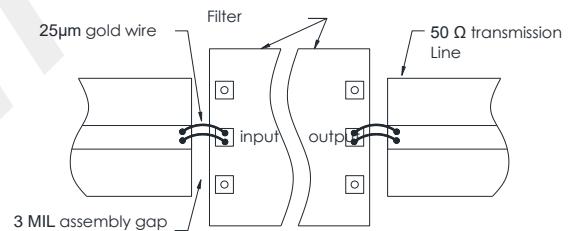
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

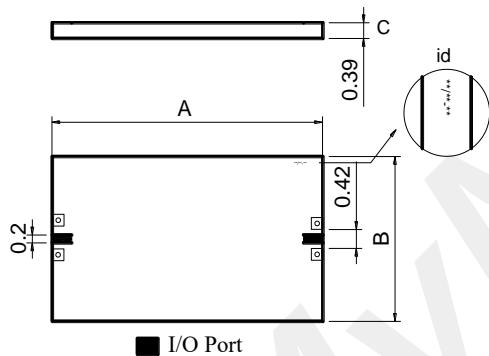
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

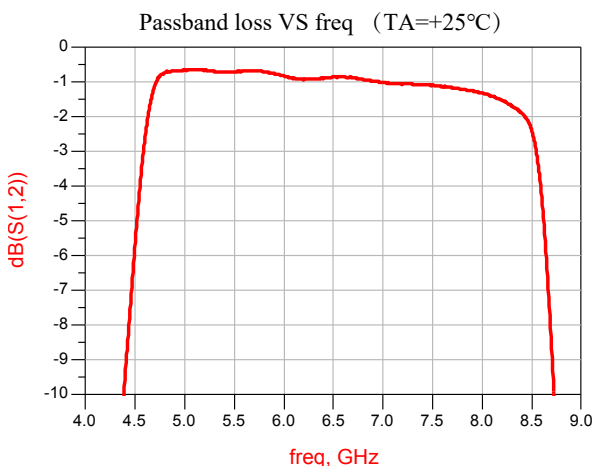
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.5	-	GHz
Passband freq range	4.7	-	8.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
return loss	-	14	-	dB
Out-of-band atten	≥40@2.9GHz			dB
	≥40@9.55GHz			dB

Dimensions

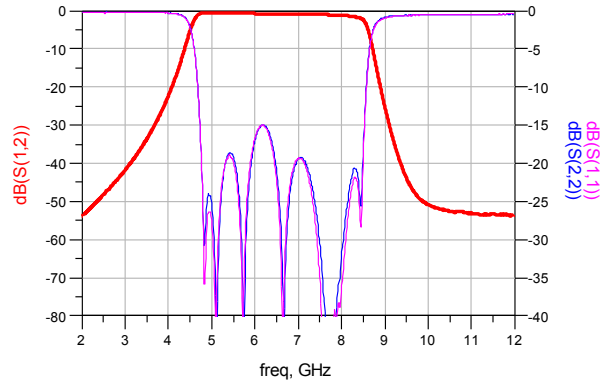


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	5.9	-	6

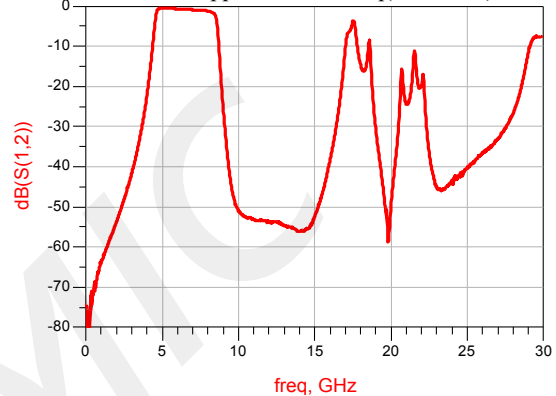
Typical test curve



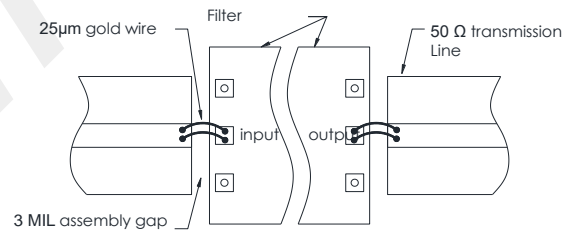
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

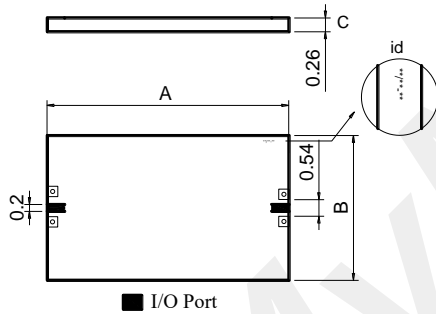
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

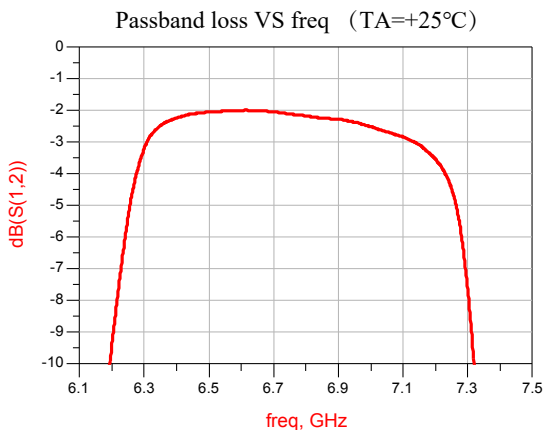
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.72	-	GHz
Passband freq range	6.37	-	7.07	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@5.6GHz		-	dB
	≥40@7.65GHz		-	dB

Dimensions

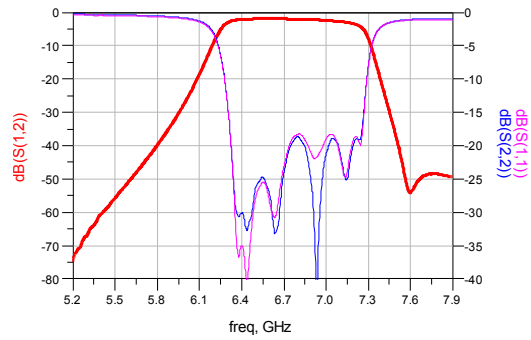


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.4	-	6.5
B	6.4	-	6.5

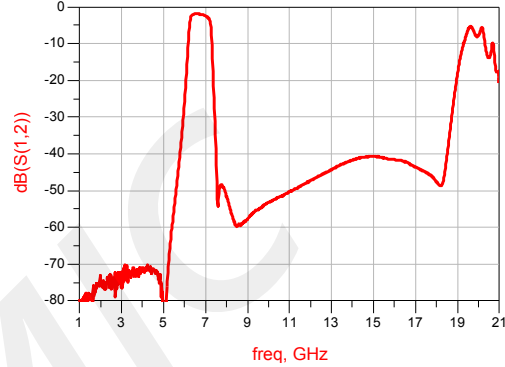
Typical test curve



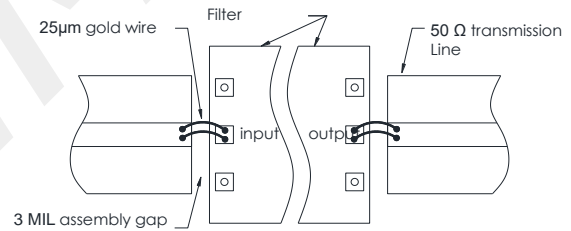
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

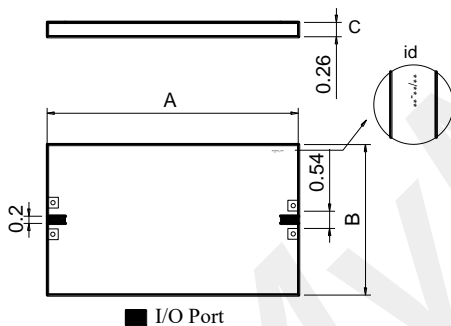
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

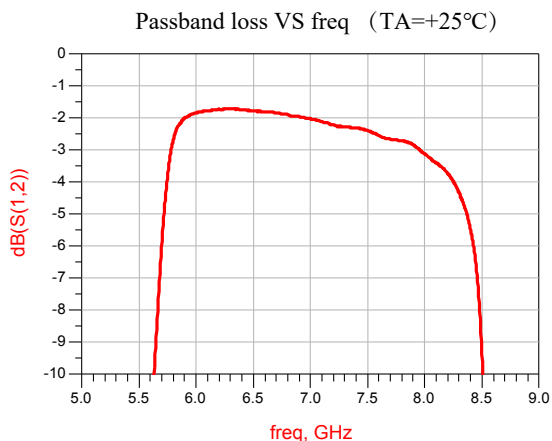
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.81	-	GHz
Passband freq range	5.83	-	7.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@4.8GHz		-	dB
	≥40@8.9GHz		-	dB

Dimensions

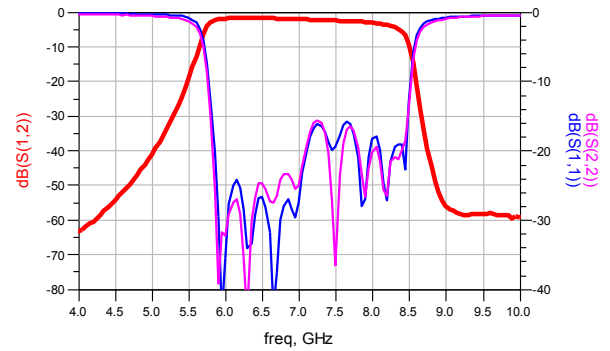


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.3	-	5.4

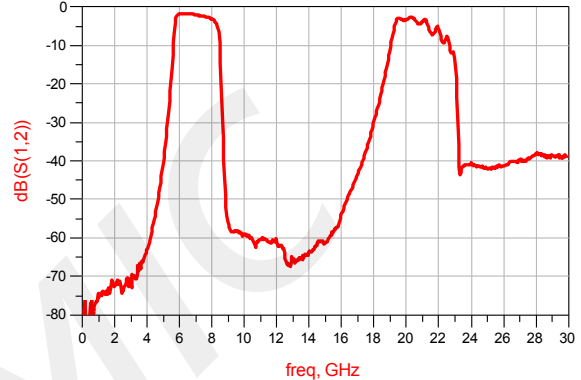
Typical test curve



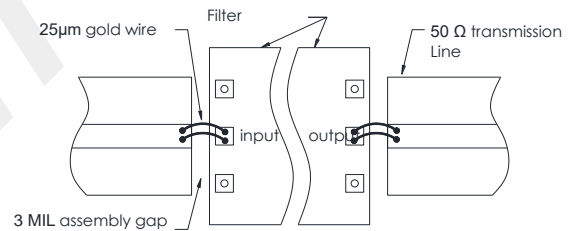
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

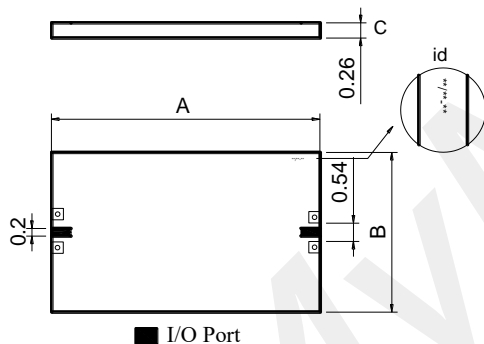
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.9	-	GHz
Passband freq range	5.8	-	8.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@4.8GHz		-	dB
	≥40@9.0GHz		-	dB

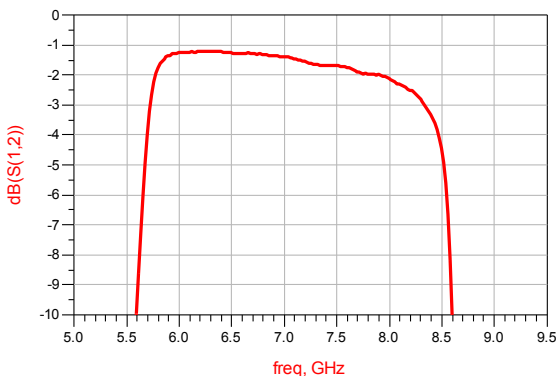
Dimensions



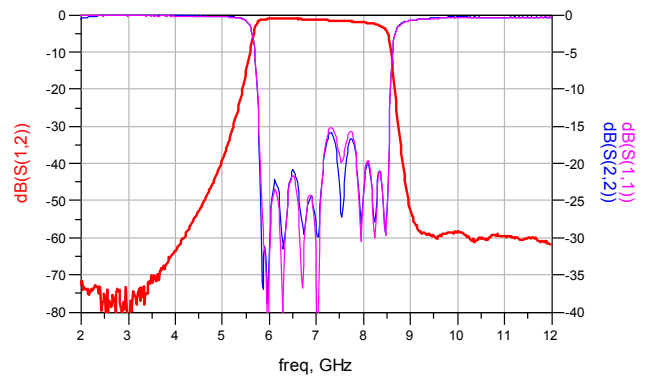
Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	5.3	-	5.4

Typical test curve

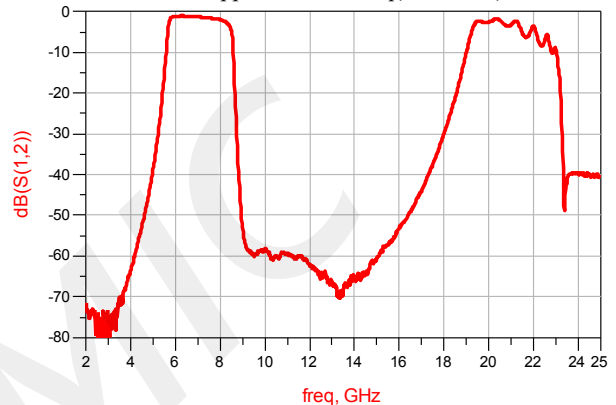
Passband loss VS freq (TA=+25°C)



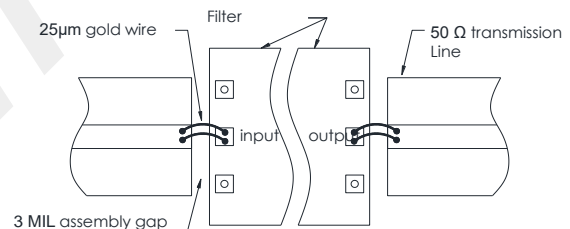
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

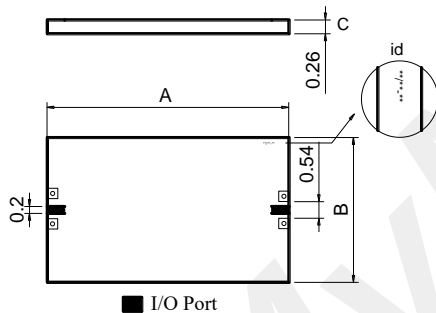
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

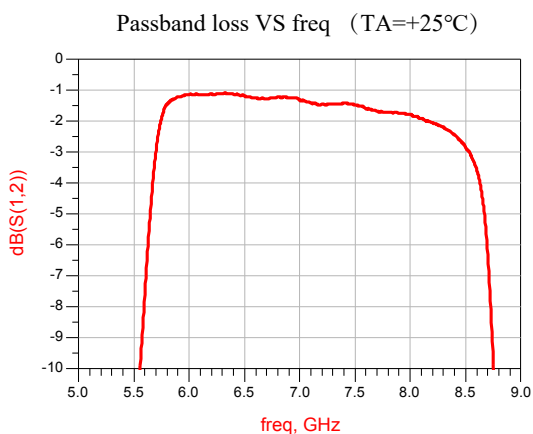
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	6.95	-	GHz
Passband freq range	5.8	-	8.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@4.6GHz		-	dB
	≥40@9.2GHz		-	dB

Dimensions

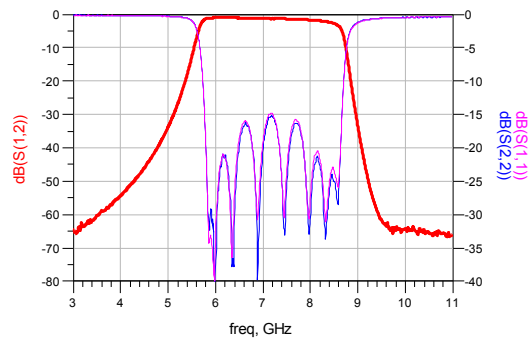


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	4.8	-	4.9

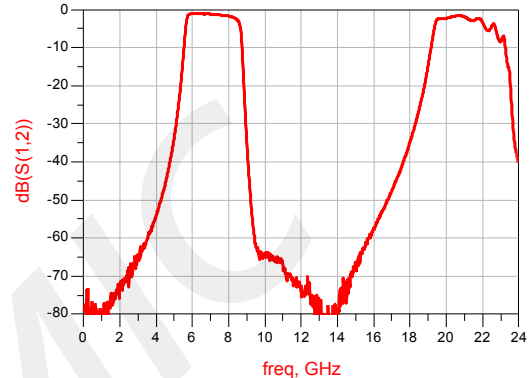
Typical test curve



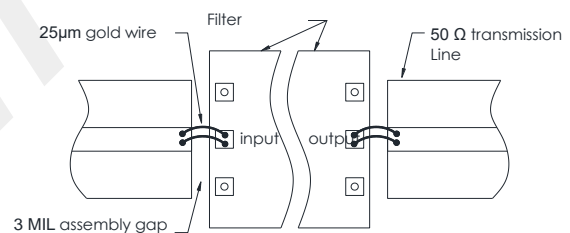
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

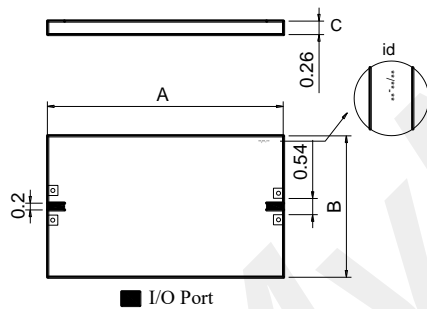
- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

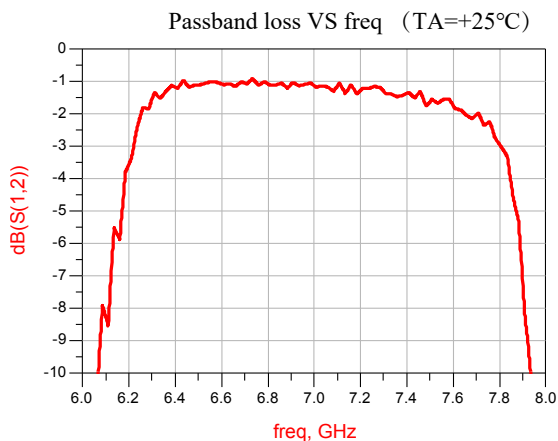
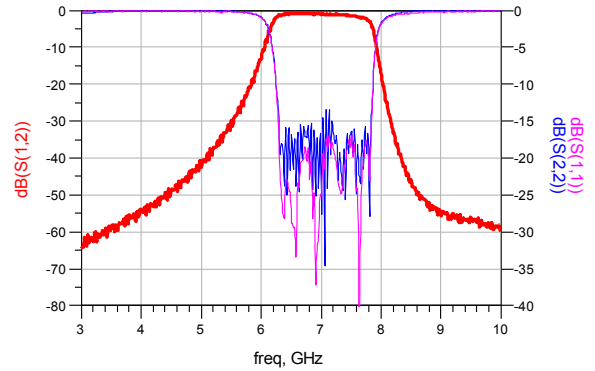
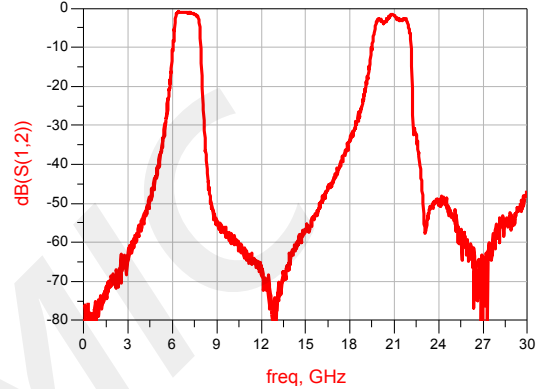
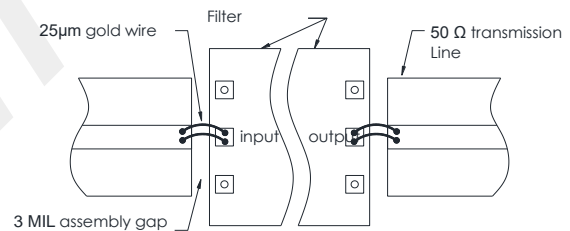
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification (T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	7	-	GHz
Passband freq range	6.3	-	7.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	16.5	-	dB
Out-of-band atten	≥40@4.8GHz		-	dB
	≥40@8.6GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	5	-	5.1

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq (TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

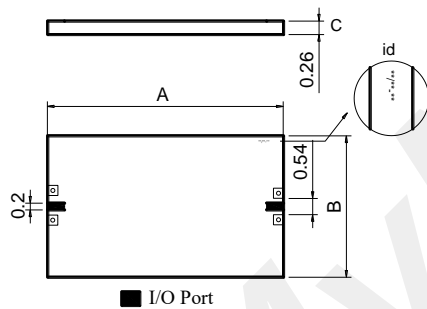
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

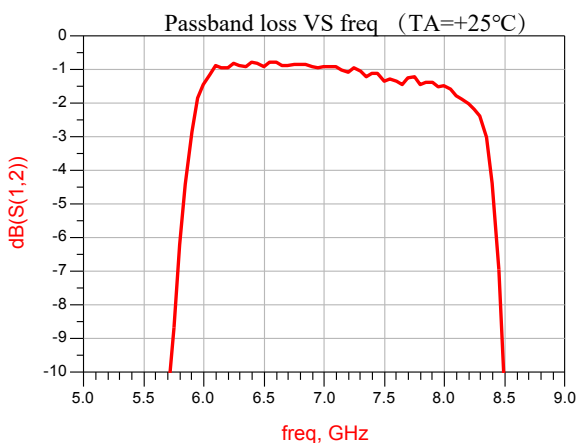
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

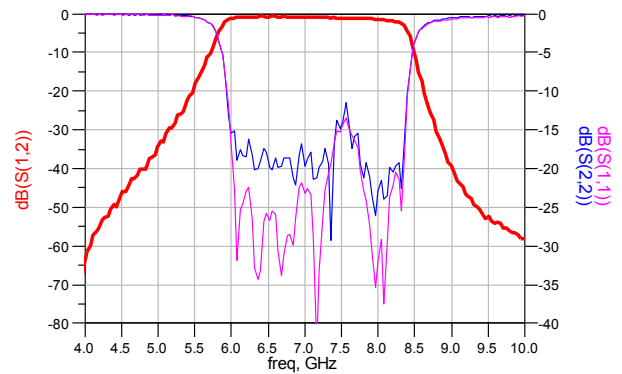
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	7	-	GHz
Passband freq range	6	-	8	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.0	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@4.6GHz			dB
	≥40@9.2GHz			dB

Dimensions


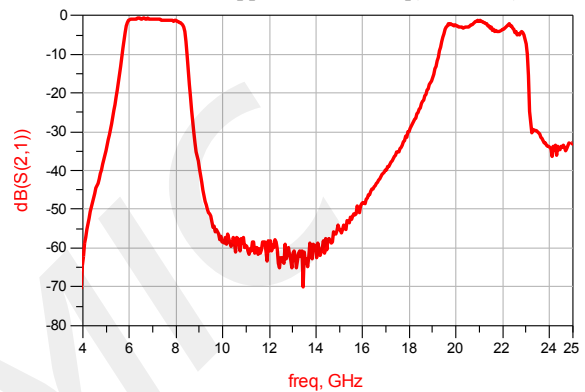
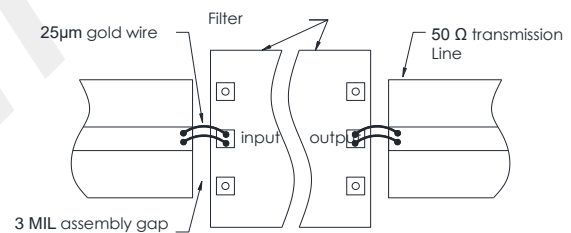
Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.9	-	5

Typical test curve


Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)


Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

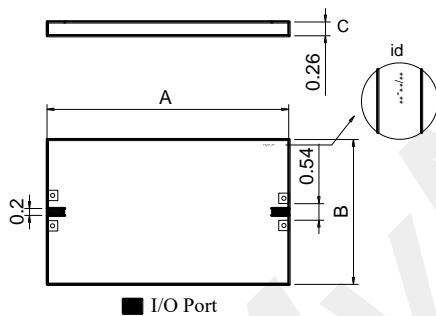
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

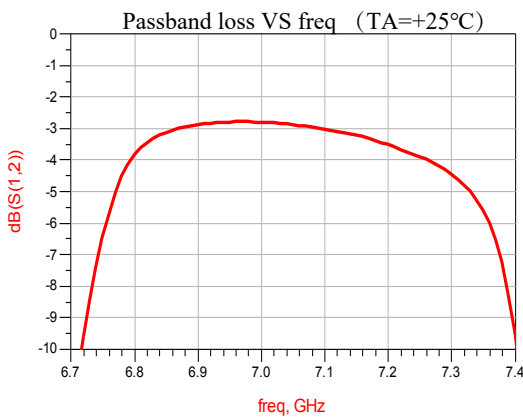
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	7	-	GHz
Passband freq range	6.82	-	7.14	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@6.35GHz		-	dB
	≥40@7.65GHz		-	dB

Dimensions

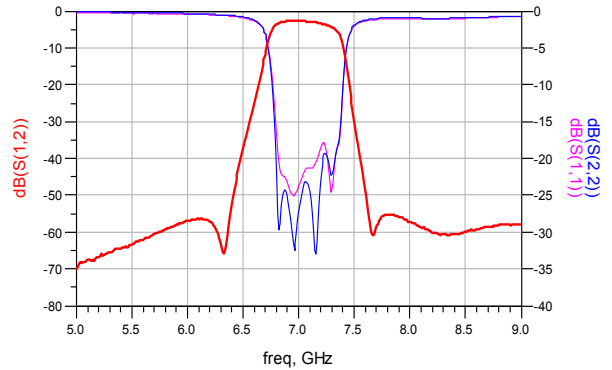


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	6.2	-	6.3

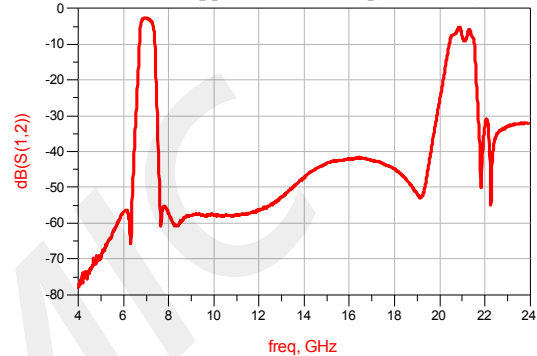
Typical test curve



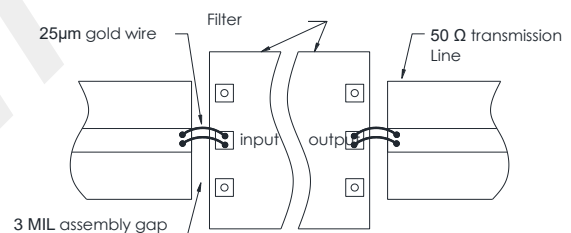
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

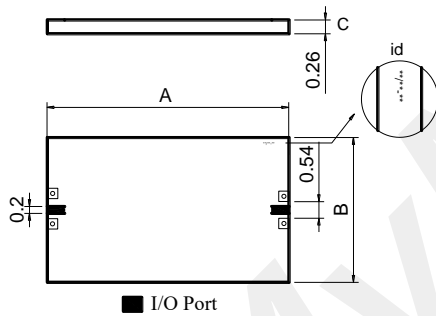
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

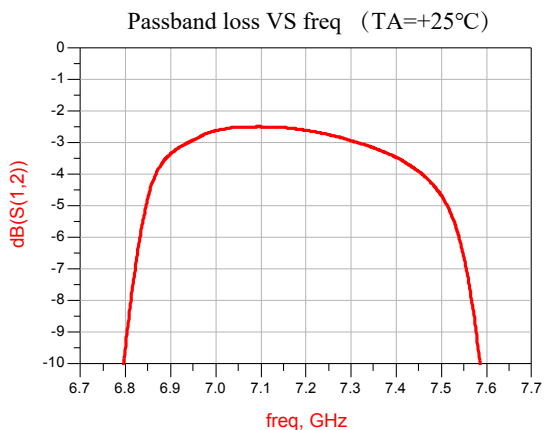
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	7.15	-	GHz
Passband freq range	6.95	-	7.35	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@6.45GHz		-	dB
	≥40@7.9GHz		-	dB

Dimensions

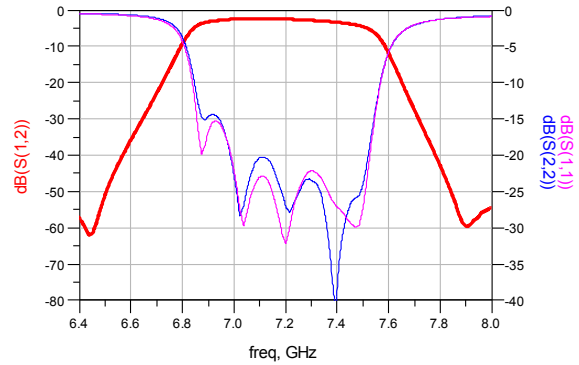


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.4	-	7.5
B	6.1	-	6.2

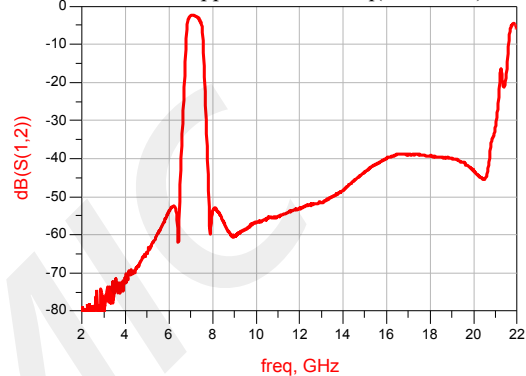
Typical test curve



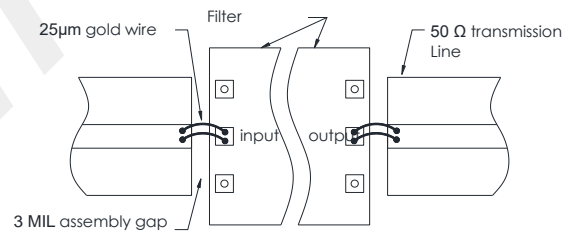
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

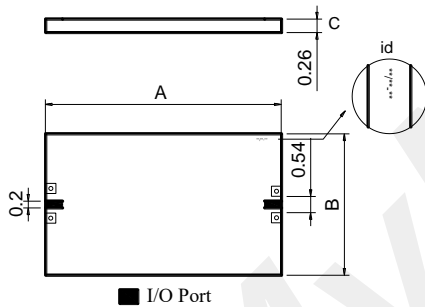
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

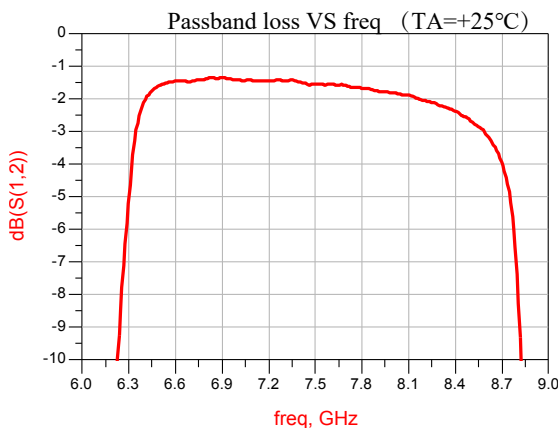
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	7.3	-	GHz
Passband freq range	6.5	-	8.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@5.5GHz		-	dB
	≥40@9.1GHz		-	dB

Dimensions

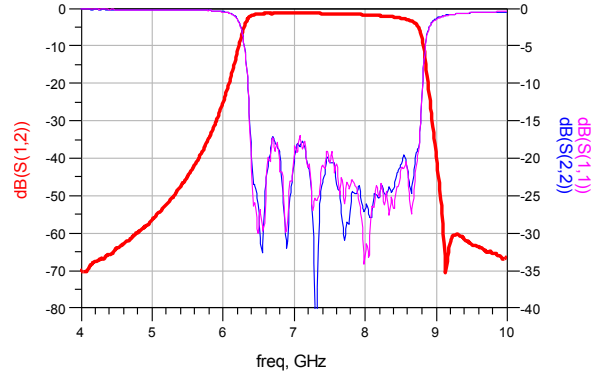


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	4.9	-	5

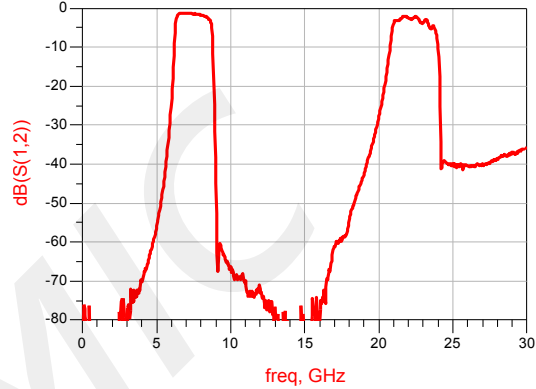
Typical test curve



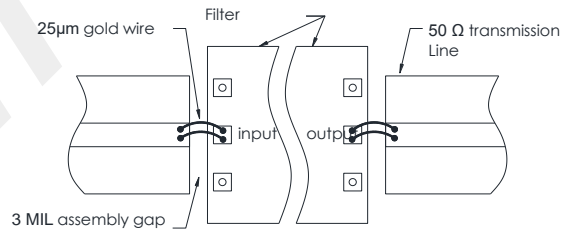
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

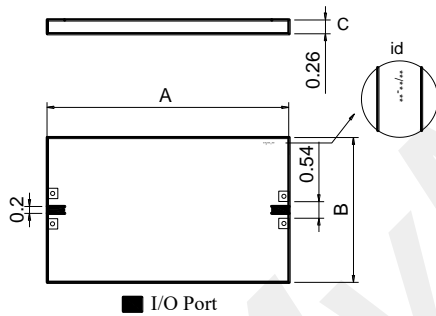
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

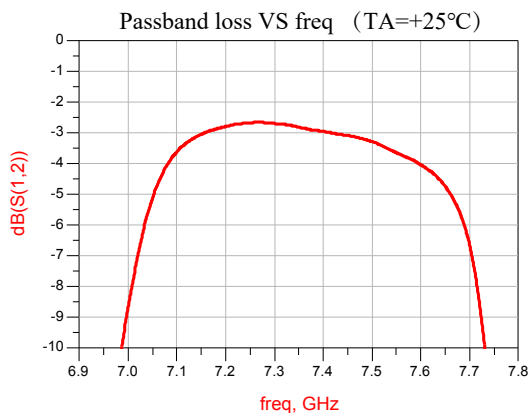
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	7.35	-	GHz
Passband freq range	7.2	-	7.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@6.6GHz		-	dB
	≥40@8.0GHz		-	dB

Dimensions

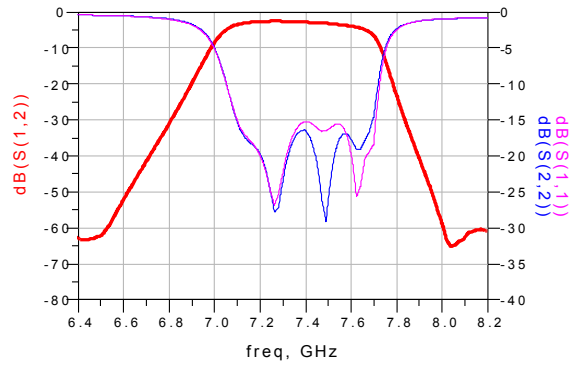


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.4	-	7.5
B	5.9	-	6.0

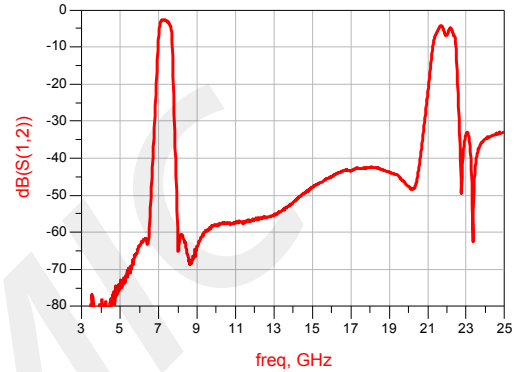
Typical test curve



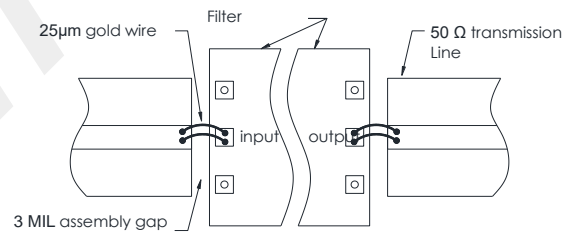
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

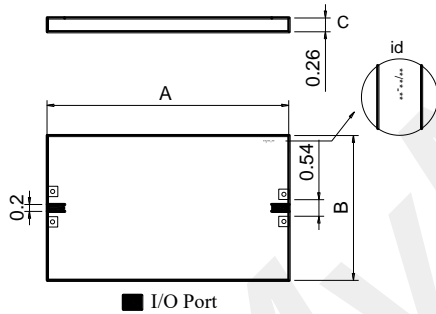
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

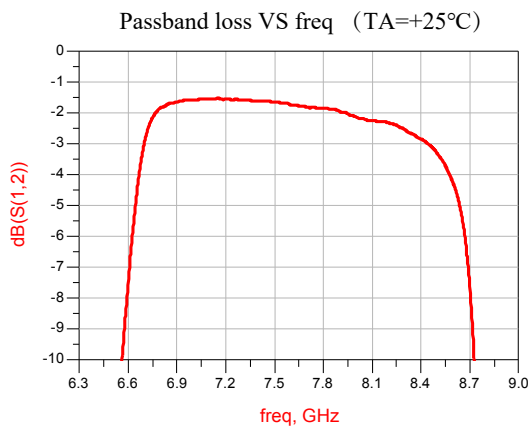
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	7.5	-	GHz
Passband freq range	6.8	-	8.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	$\geq 40@5.7\text{GHz}$		-	dB
	$\geq 40@9.05\text{GHz}$		-	dB

Dimensions

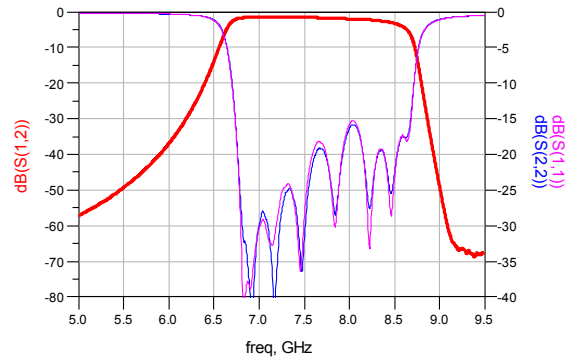


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	4.7	-	4.8

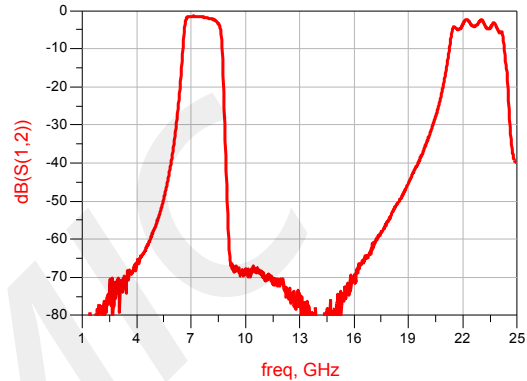
Typical test curve



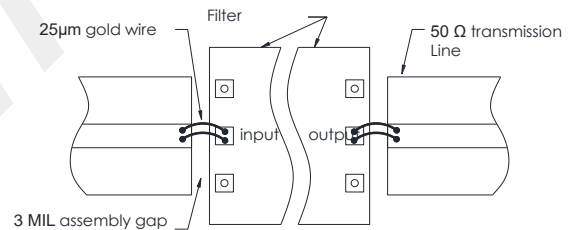
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness $\geq 0.2\text{mm}$.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

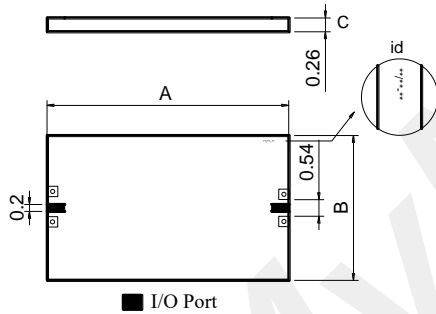
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

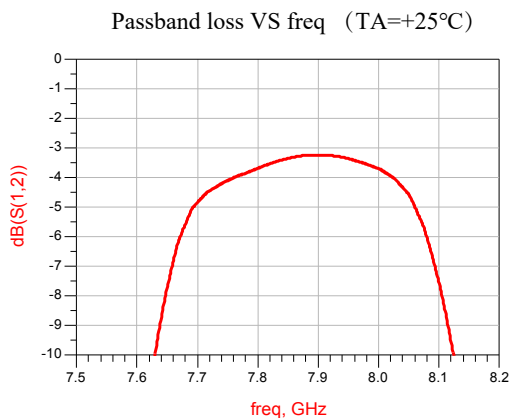
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	7.9	-	GHz
Passband freq range	7.83	-	8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@7.3GHz		-	dB
	≥40@8.5GHz		-	dB

Dimensions

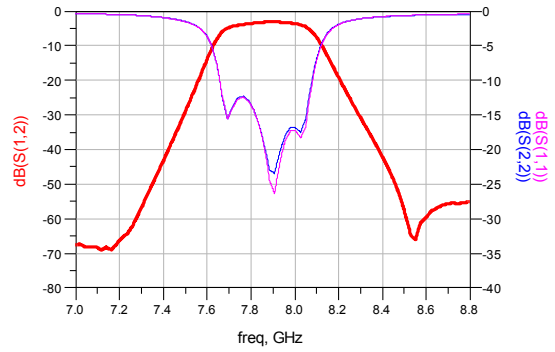


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.4	-	6.5
B	3.9	-	4.0

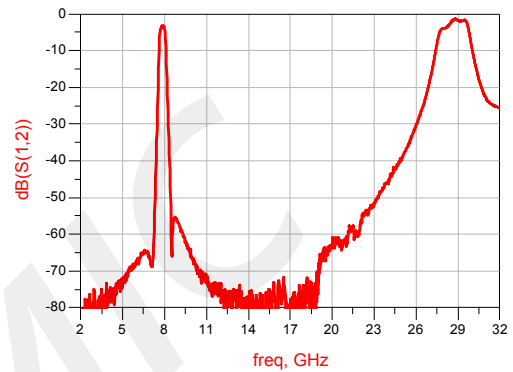
Typical test curve



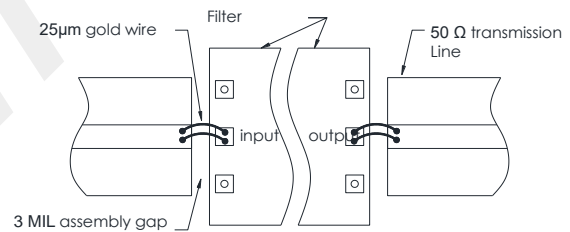
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

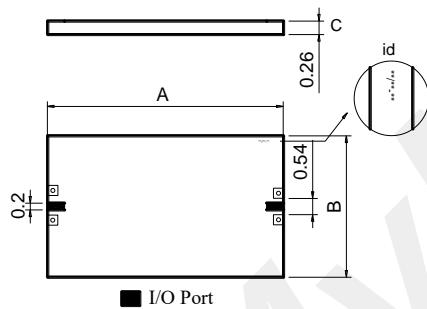
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

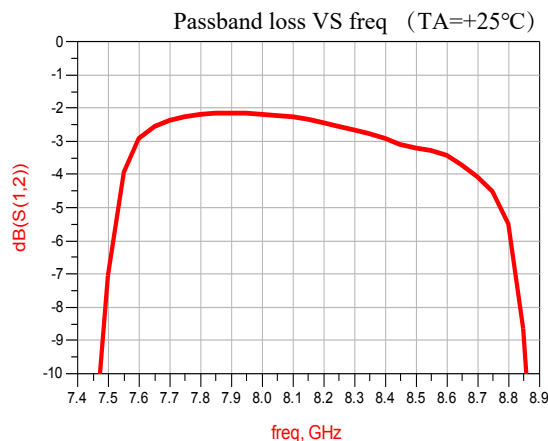
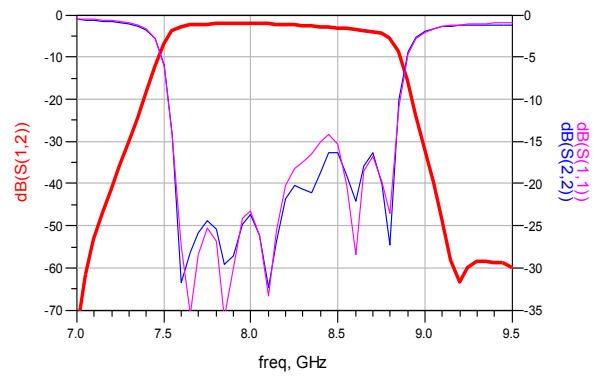
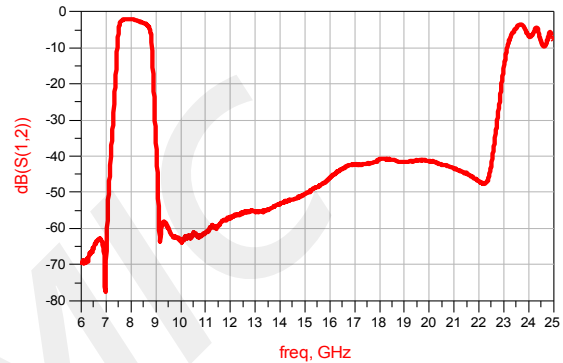
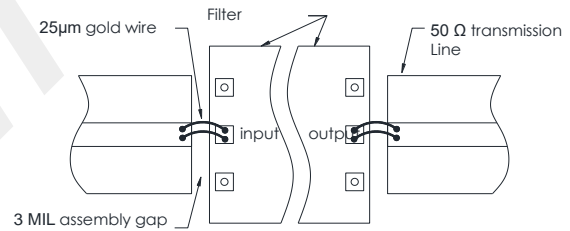
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8	-	GHz
Passband freq range	7.6	-	8.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@7.15GHz		-	dB
	≥40@9.15GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.9	-	6

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

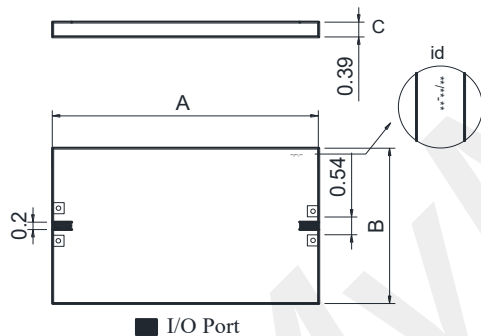
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

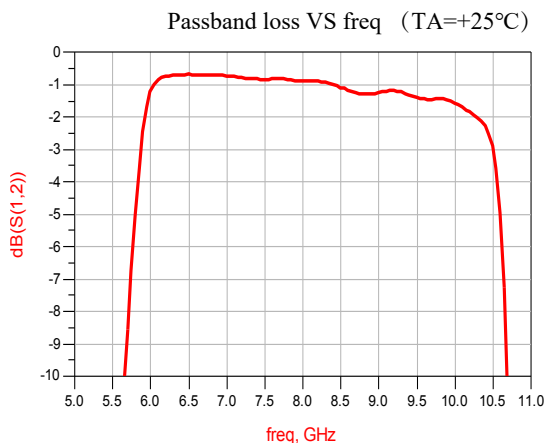
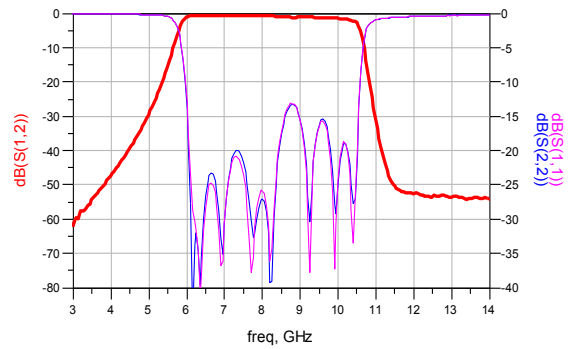
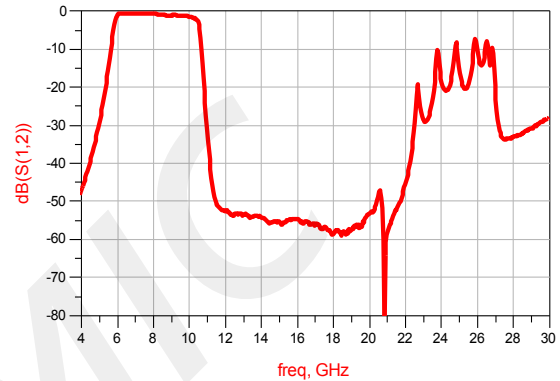
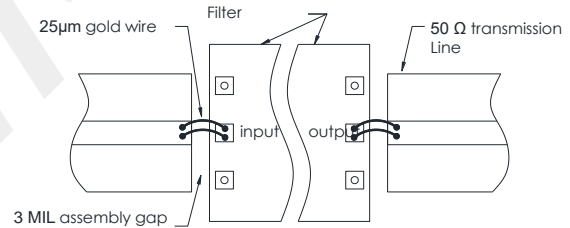
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8	-	GHz
Passband freq range	6	-	10	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@4GHz		-	dB
	≥40@11.5GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	4.8	-	4.9

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

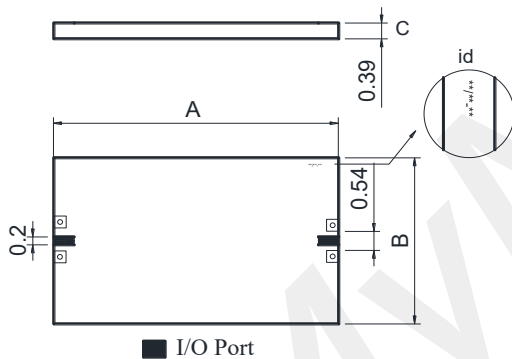
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

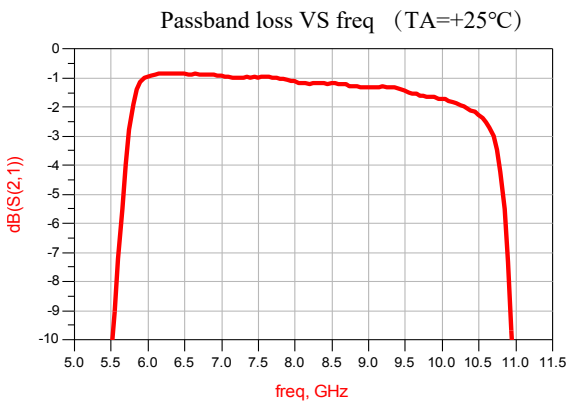
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8	-	GHz
Passband freq range	5.9	-	10.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15.5	-	dB
Out-of-band atten	≥40@4GHz			dB
	≥40@11.75GHz			dB

Dimensions

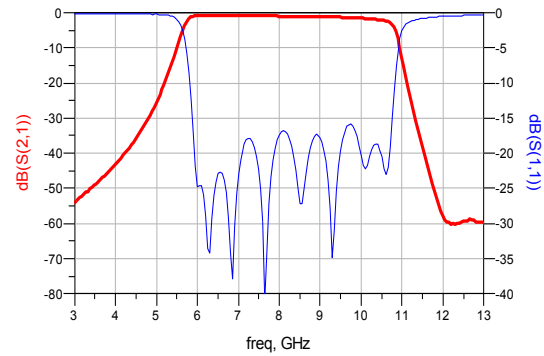


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	4.5	-	4.6

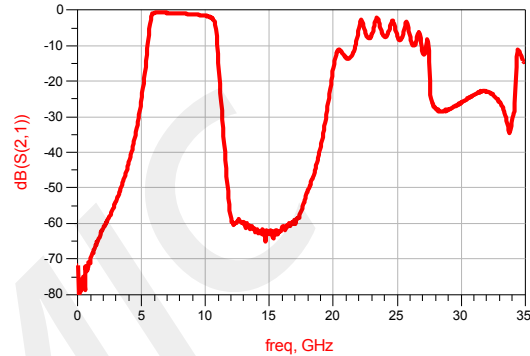
Typical test curve



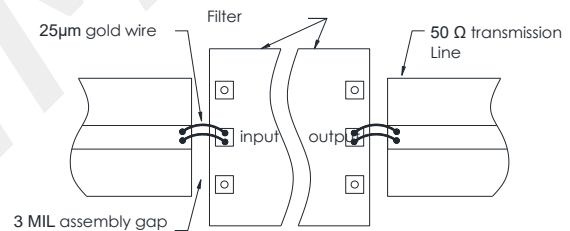
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

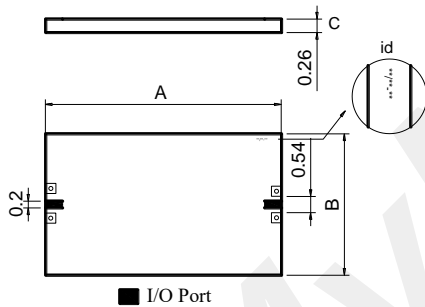
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

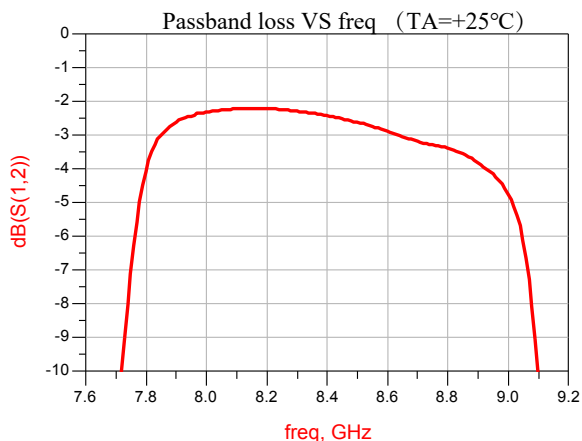
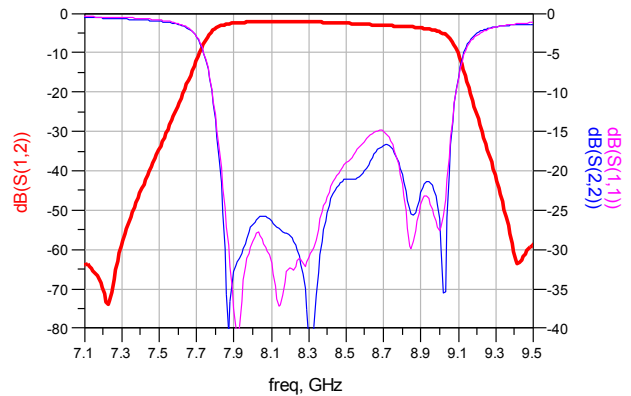
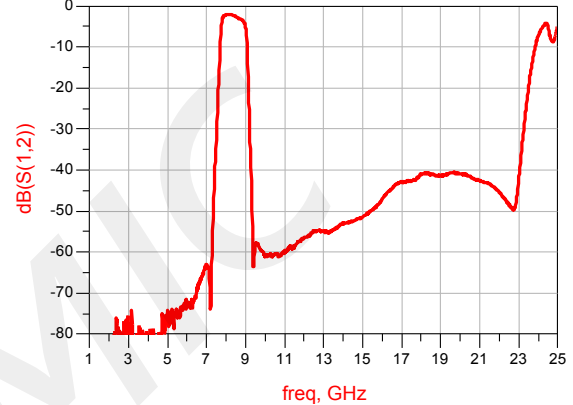
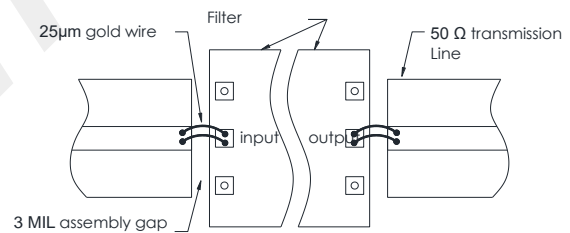
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.3	-	GHz
Passband freq range	7.9	-	8.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.0	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@7.35GHz			dB
	≥40@9.4GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.9	-	6

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

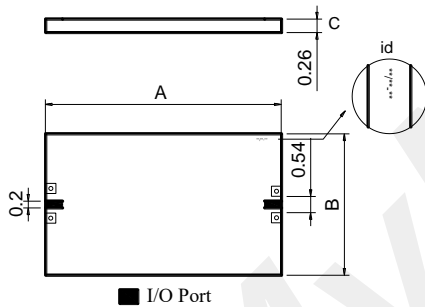
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

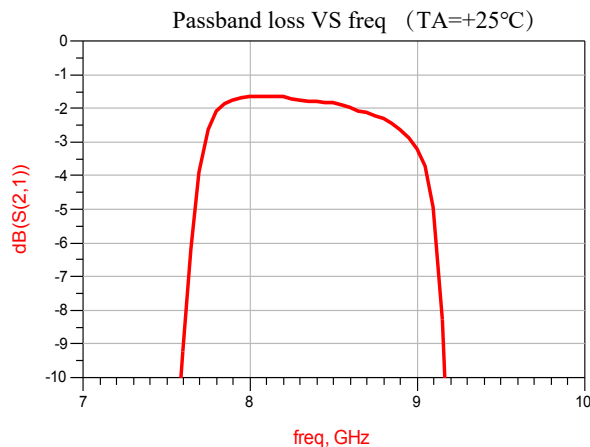
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.3	-	GHz
Passband freq range	7.8	-	8.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@6.8GHz			dB
	≥40@9.6GHz			dB

Dimensions

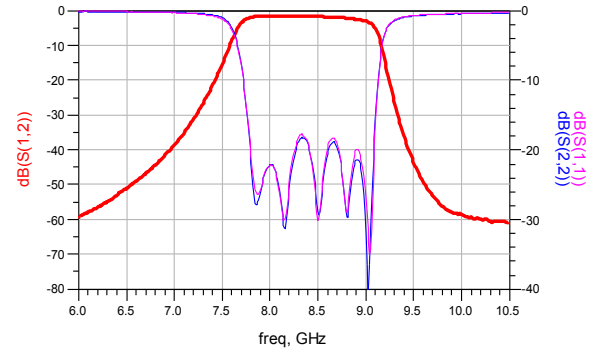


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	4.4	-	4.5

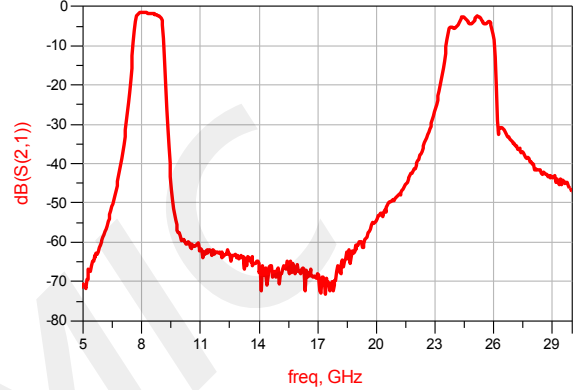
Typical test curve



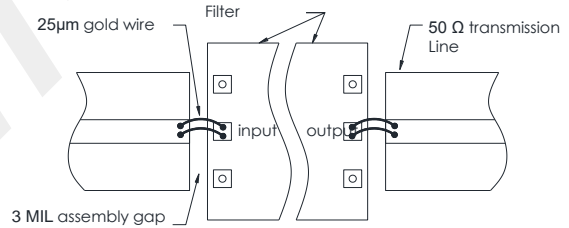
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

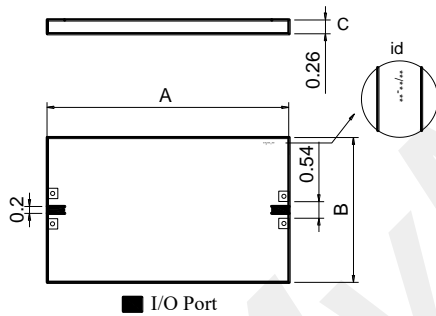
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

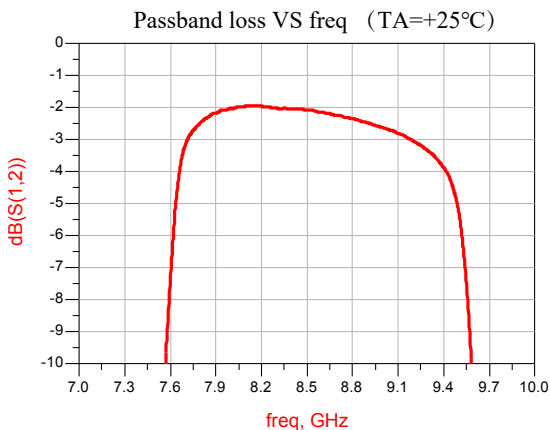
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.45	-	GHz
Passband freq range	7.8	-	9.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	21	-	dB
Out-of-band atten	≥40@7.1GHz		-	dB
	≥40@10.0GHz		-	dB

Dimensions

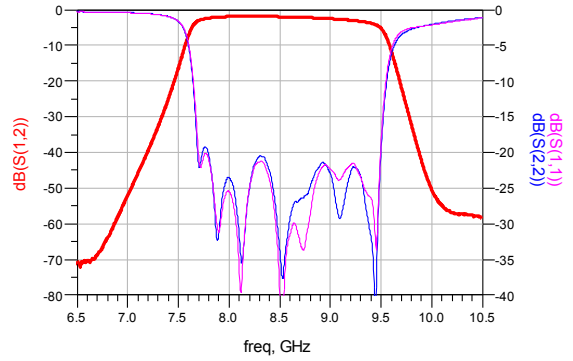


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	5.4	-	5.5

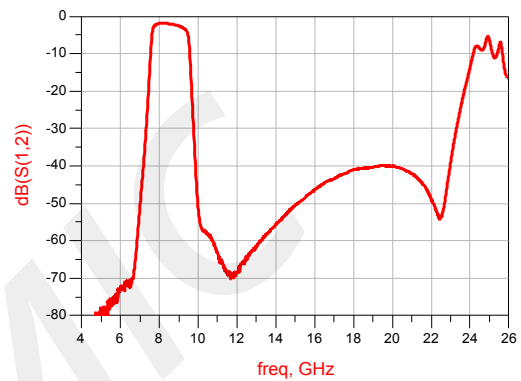
Typical test curve



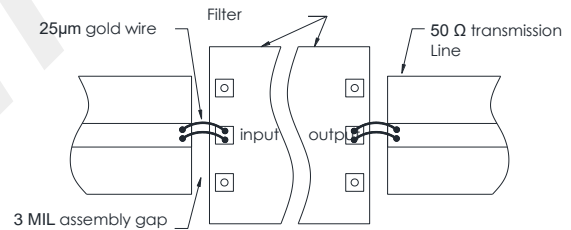
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

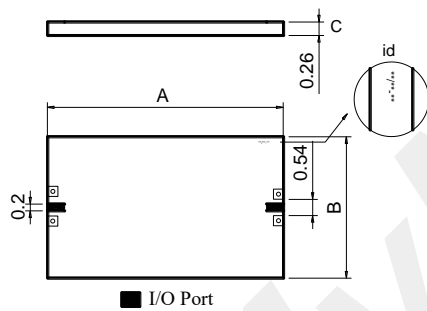
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

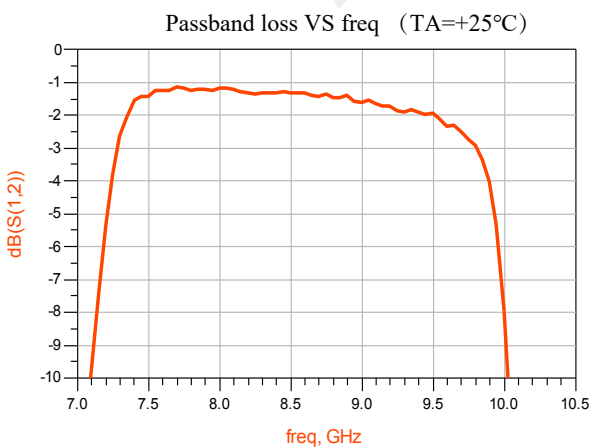
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.45	-	GHz
Passband freq range	7.4	-	9.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.0	-	dB
Return loss	-	15.5	-	dB
Out-of-band atten	≥40@5.85GHz			dB
	≥40@10.65GHz			dB

Dimensions

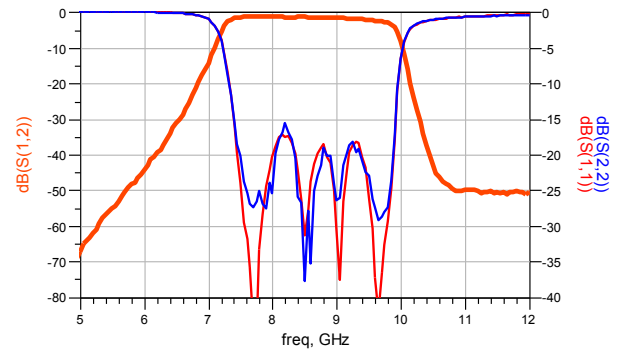


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.5	-	4.6

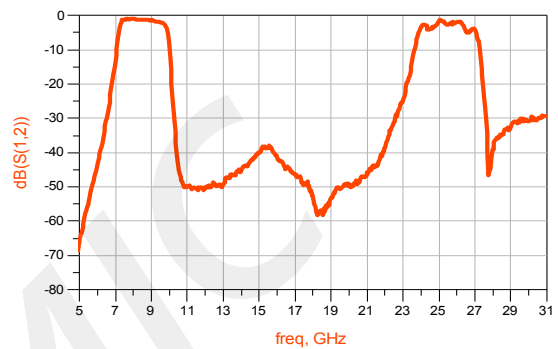
Typical test curve



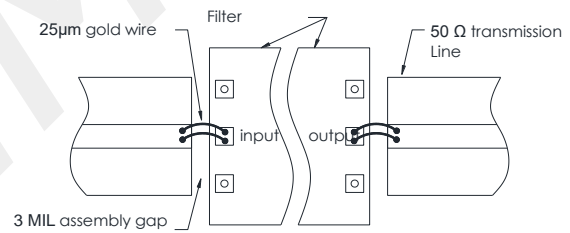
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

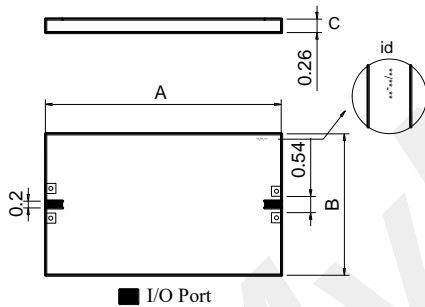
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

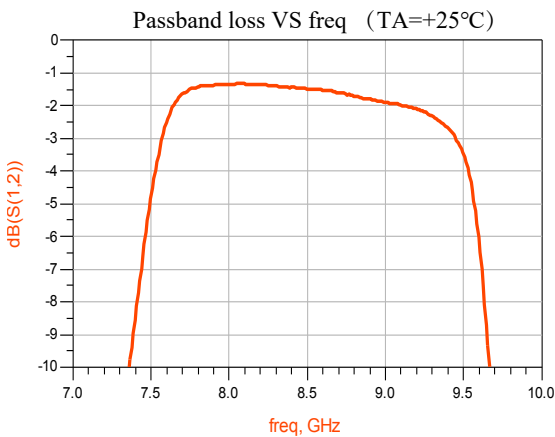
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.5	-	GHz
Passband freq range	7.7	-	9.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@6.0GHz			dB
	≥40@10.5GHz			dB

Dimensions

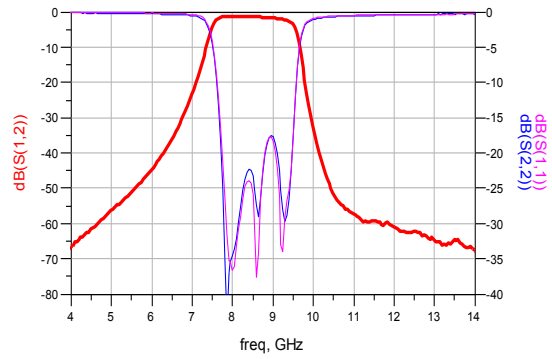


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.5	-	4.6

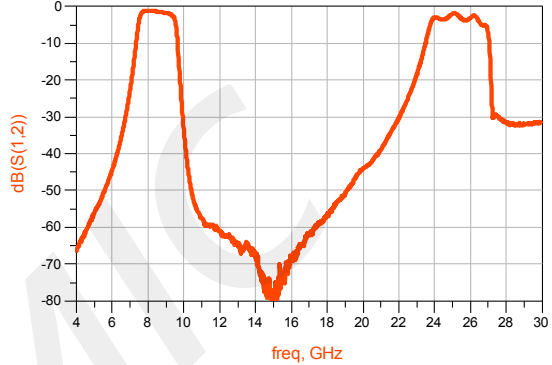
Typical test curve



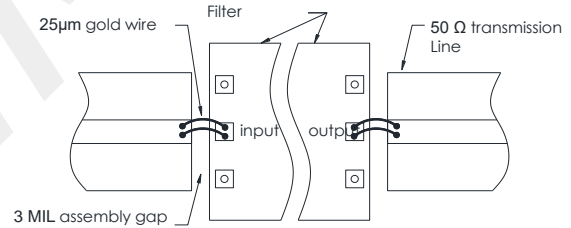
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

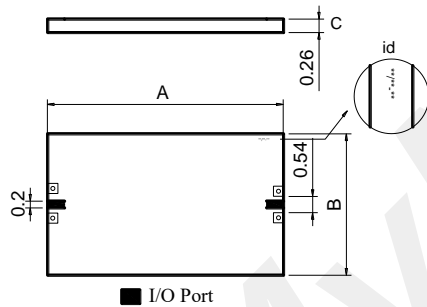
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

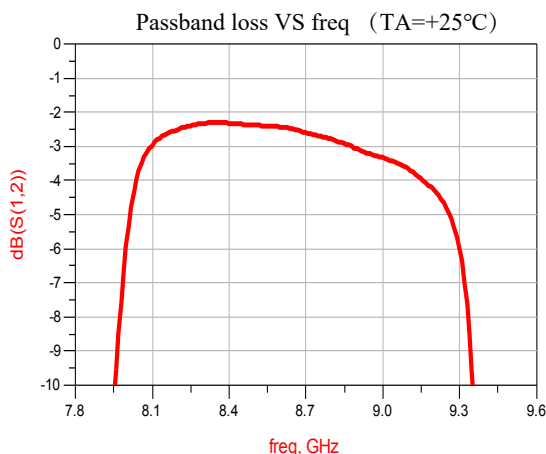
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.55	-	GHz
Passband freq range	8.1	-	8.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@7.6GHz			dB
	≥40@9.65GHz			dB

Dimensions

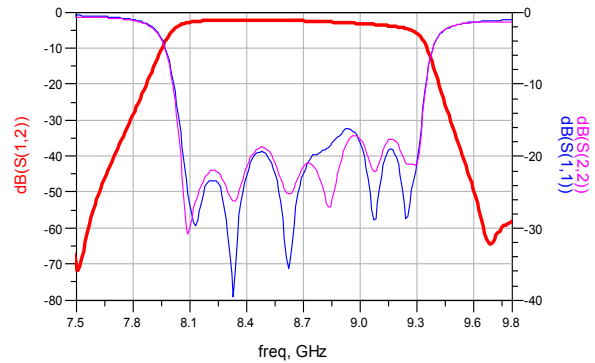


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.9	-	6

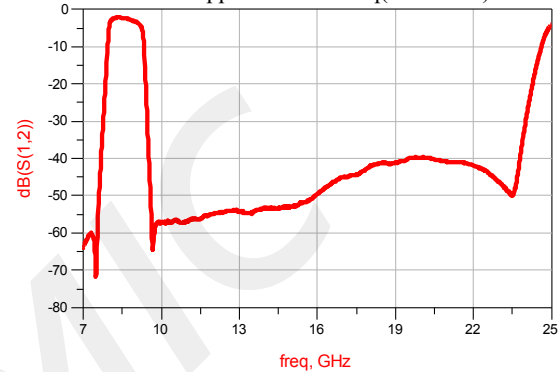
Typical test curve



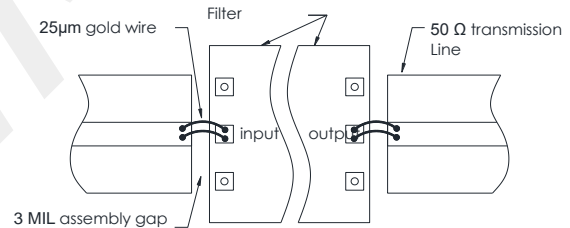
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

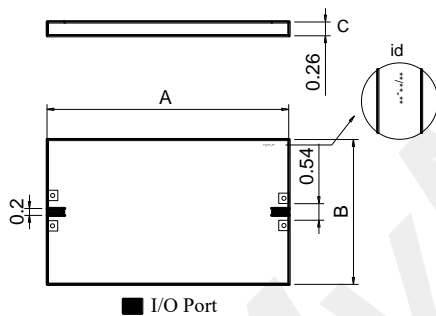
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

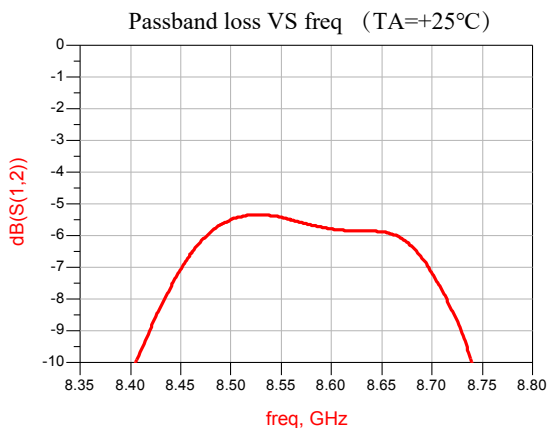
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.57	-	GHz
Passband freq range	8.47	-	8.67	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	6.0	-	dB
Return loss	-	12	-	dB
Out-of-band atten	≥40@8.2GHz		-	dB
	≥40@8.95GHz		-	dB

Dimensions

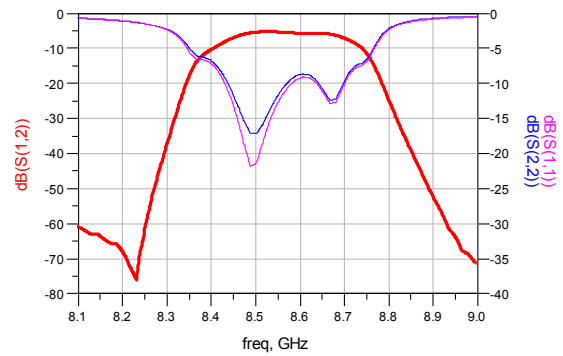


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.4	-	7.5
B	3.9	-	4.0

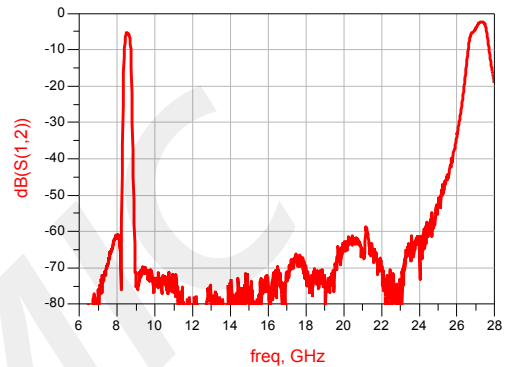
Typical test curve



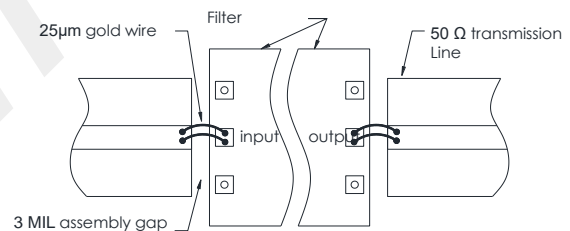
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

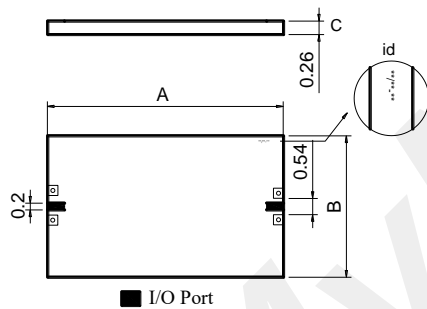
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

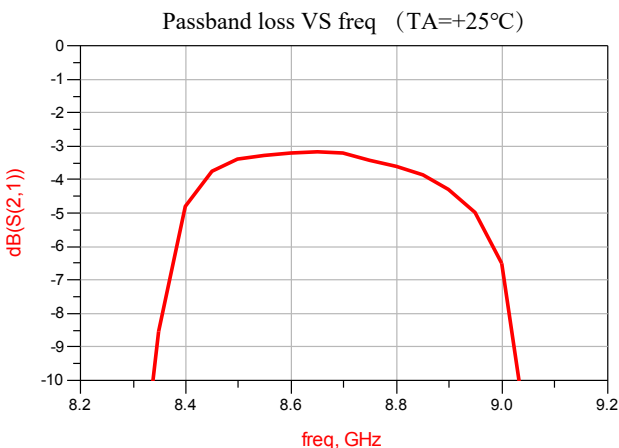
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.65	-	GHz
Passband freq range	8.45	-	8.85	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4	-	dB
Return loss	-	15.5	-	dB
Out-of-band atten	≥40@7.95GHz		-	dB
	≥40@9.3GHz		-	dB

Dimensions

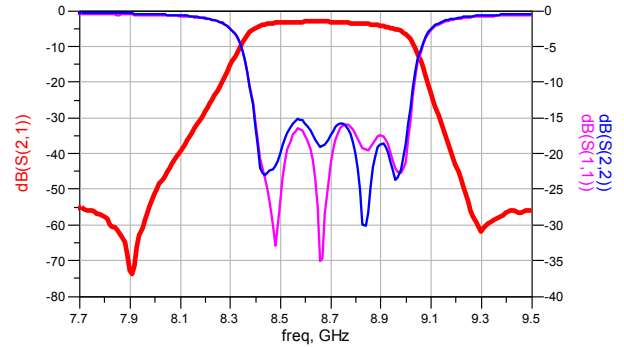


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

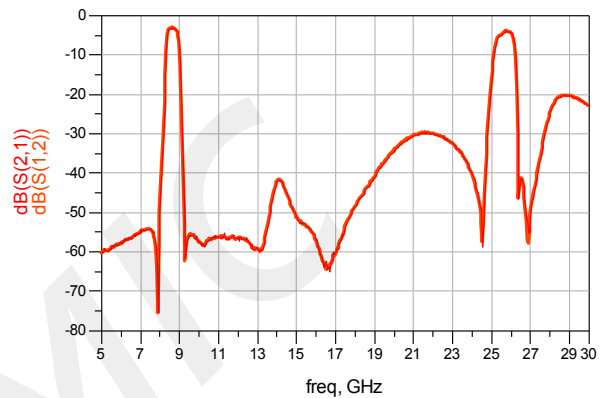
Typical test curve



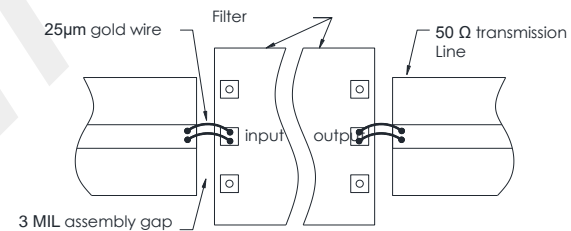
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

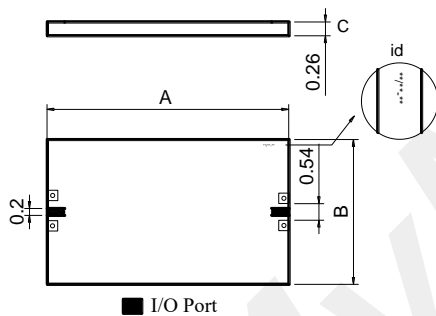
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

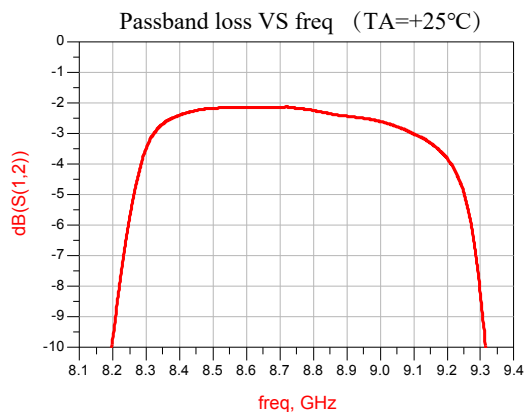
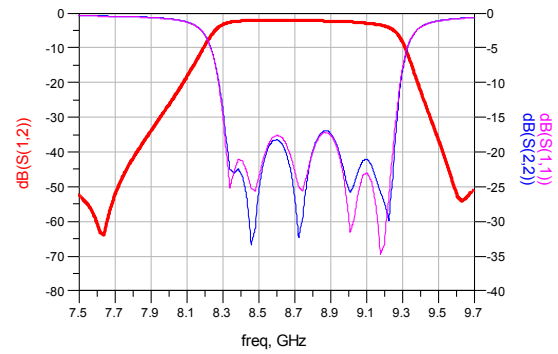
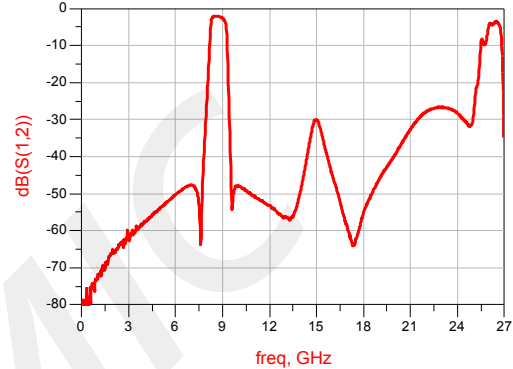
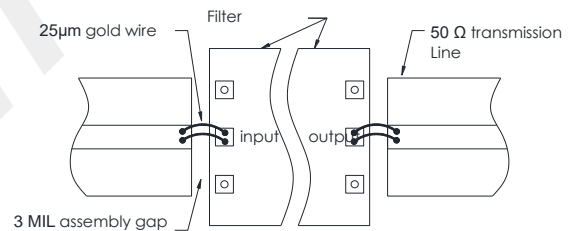
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	8.7	-	GHz
Passband freq range	8.35	-	9.05	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	$\geq 40@7.7\text{GHz}$		-	dB
	$\geq 40@9.65\text{GHz}$		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	5.4	-	5.5

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness $\geq 0.2\text{mm}$.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

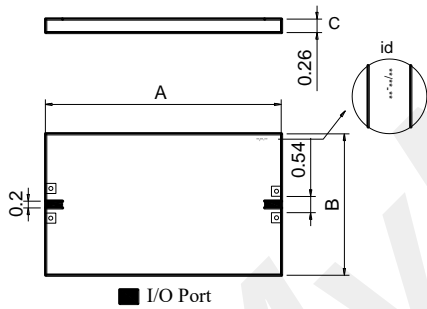
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

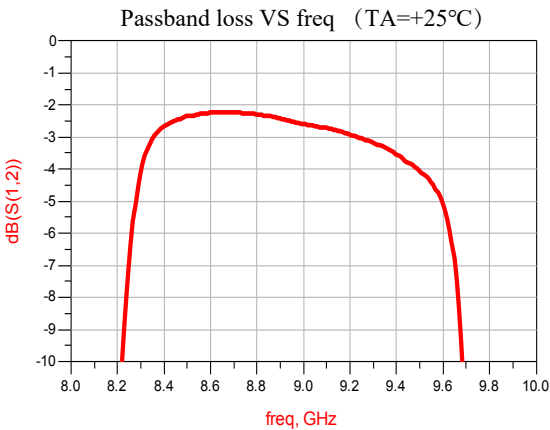
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.825	-	GHz
Passband freq range	8.35	-	9.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	19	-	dB
Out-of-band atten	≥40@7.85GHz		-	dB
	≥40@10.0GHz		-	dB

Dimensions

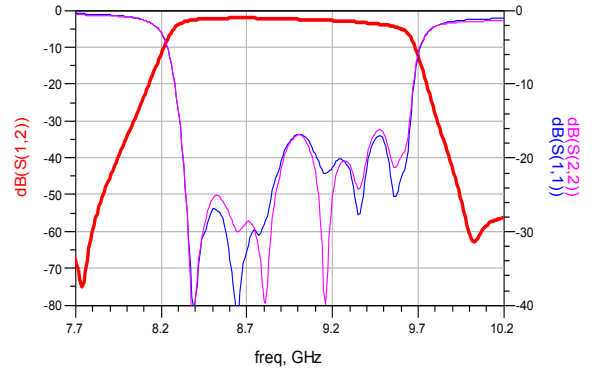


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.9	-	6

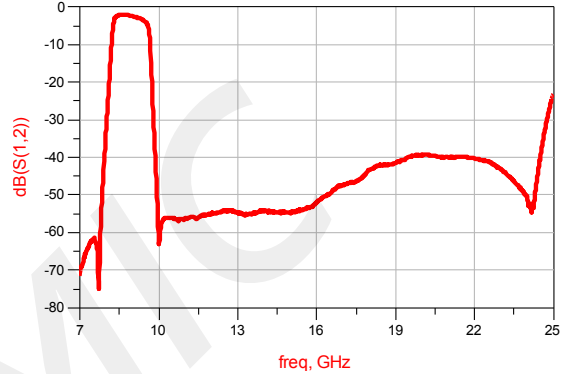
Typical test curve



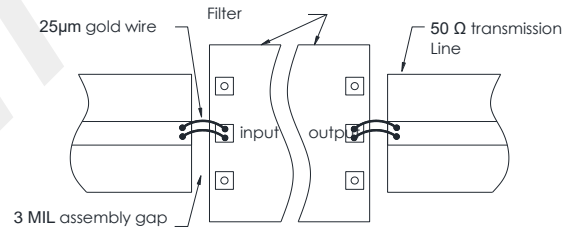
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

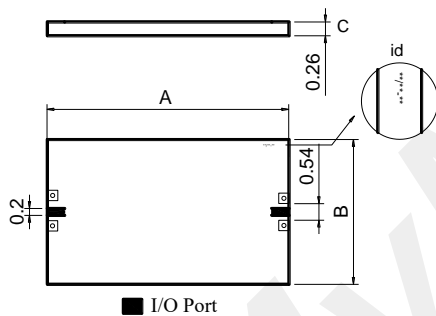
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

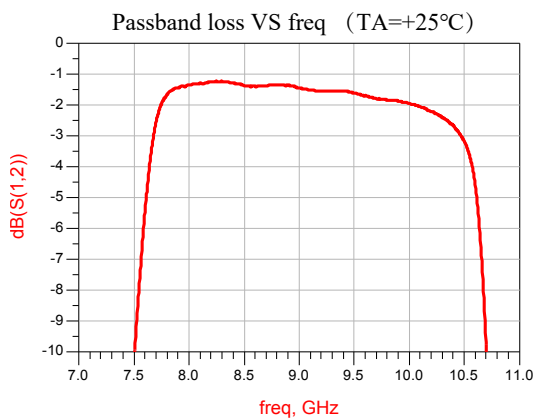
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	8.95	-	GHz
Passband freq range	7.8	-	10.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@6.5GHz		-	dB
	≥40@11.2GHz		-	dB

Dimensions

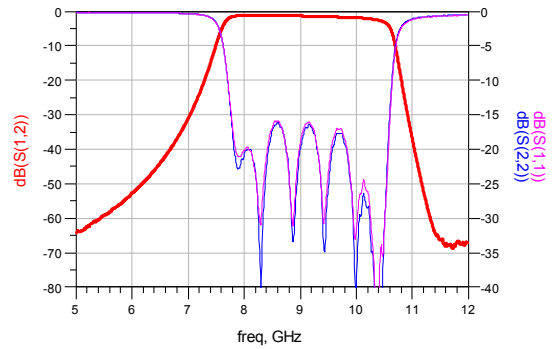


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	3.9	-	4.0

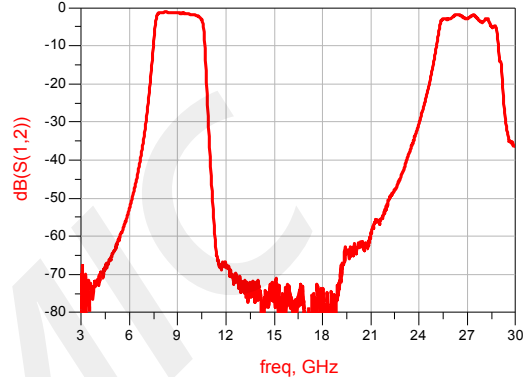
Typical test curve



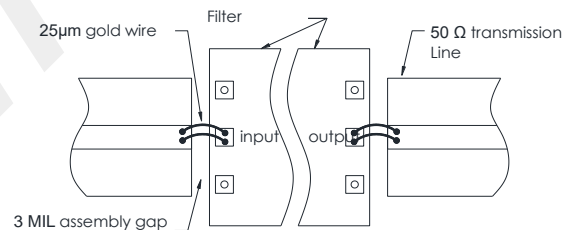
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

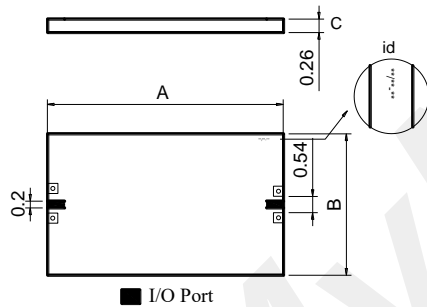
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

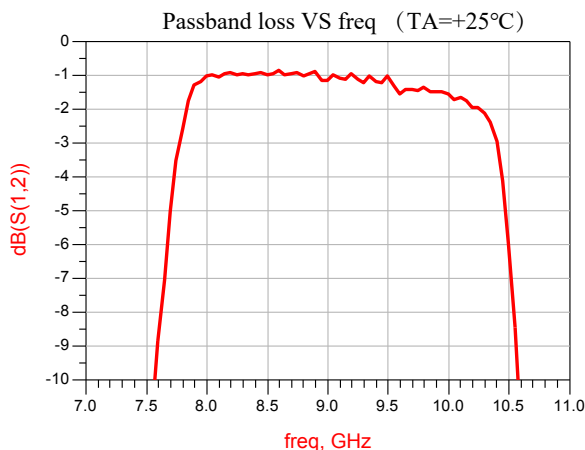
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9	-	GHz
Passband freq range	8	-	10	GHz
In-band ripple	-	-	1	dB
Center insertion loss		1.5	-	dB
Return loss	-	14.5	-	dB
Out-of-band atten	≥40@6.4GHz			dB
	≥40@11.3GHz			dB

Dimensions

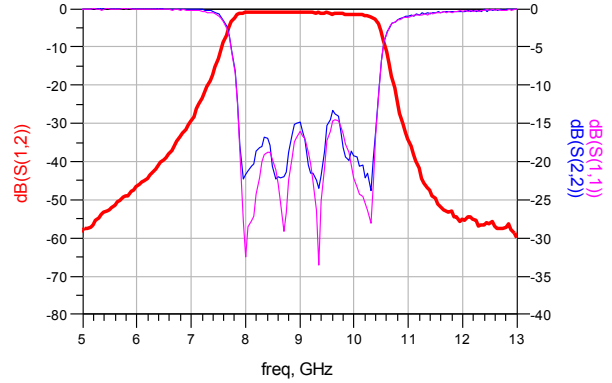


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.1	-	4.2

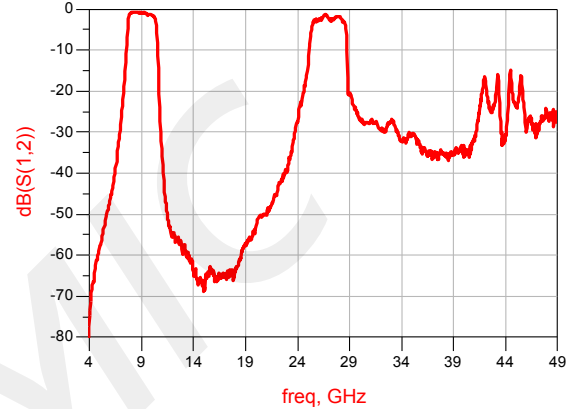
Typical test curve



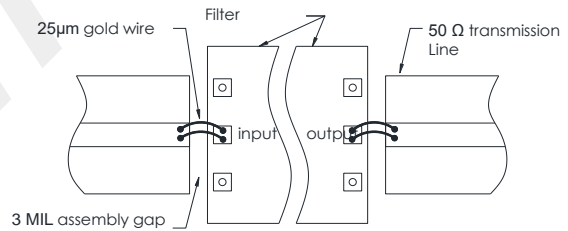
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
<p>Dimensions: 0.25, 1.84, 0.43, 0.63, 0.78</p>	<p>Dimensions: 0.29, 1.3, 0.31, 0.66, 0.55, 0</p>
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

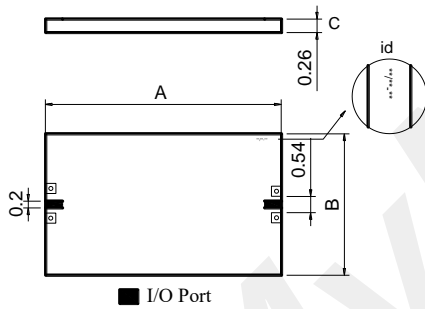
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

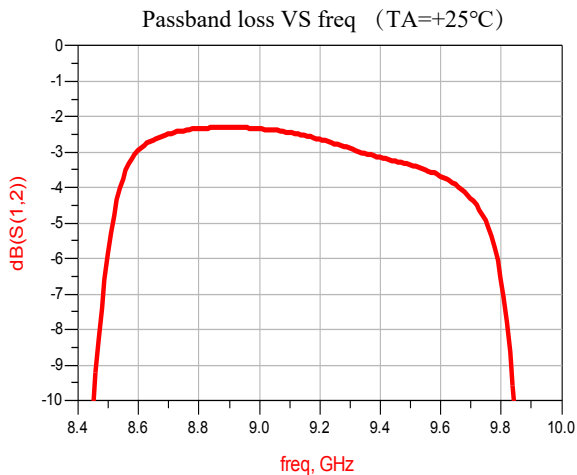
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.025	-	GHz
Passband freq range	8.6	-	9.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@8.1GHz		-	dB
	≥40@10.2GHz		-	dB

Dimensions

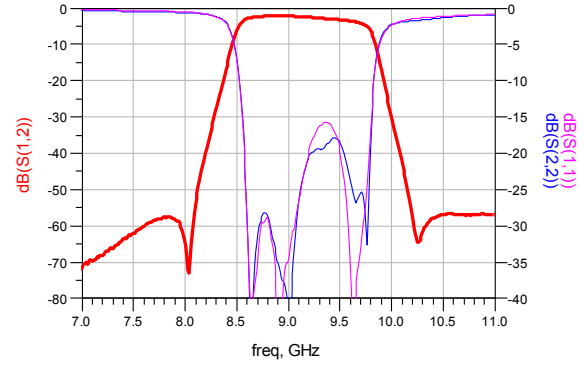


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.4	-	5.5

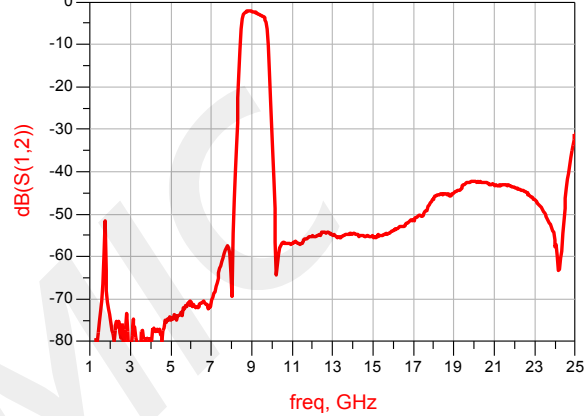
Typical test curve



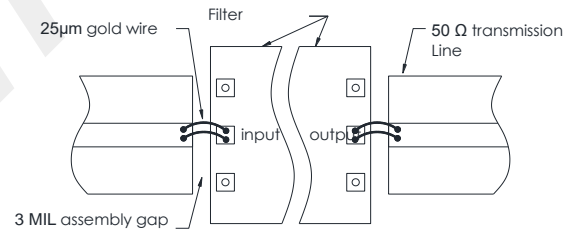
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

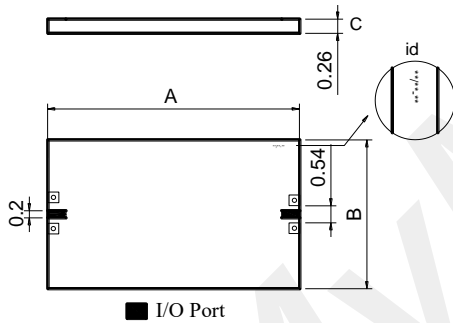
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

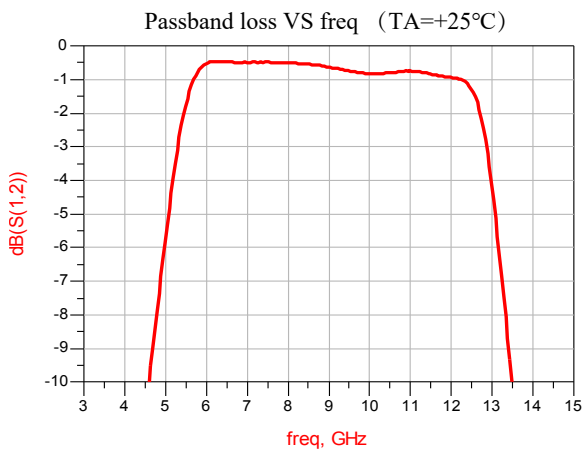
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.1	-	GHz
Passband freq range	5.7	-	12.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥30@2.0GHz		-	dB
	≥30@15.5GHz		-	dB

Dimensions

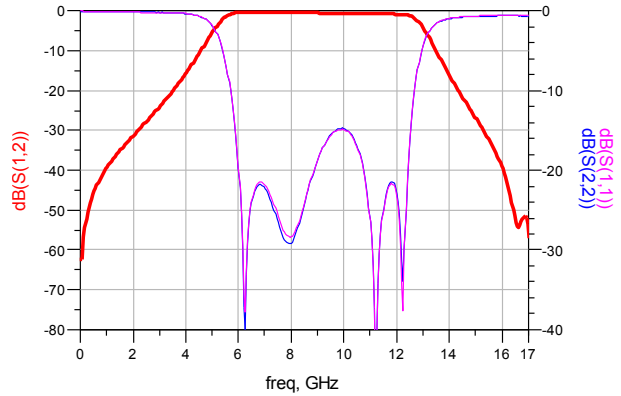


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.4	-	7.5
B	4.4	-	4.5

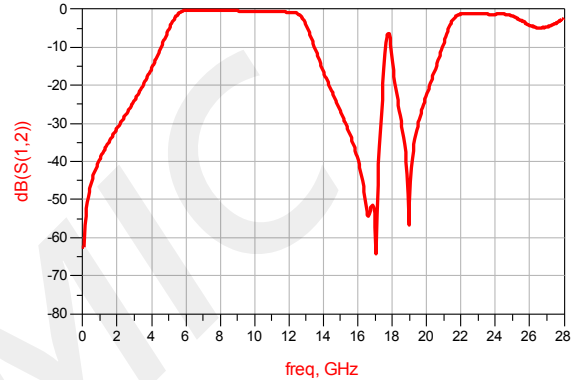
Typical test curve



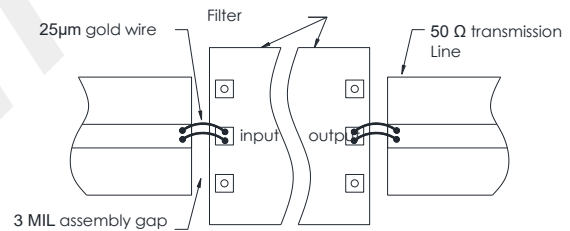
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

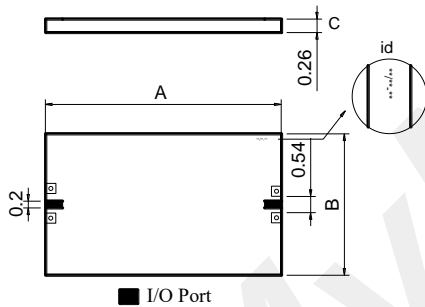
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

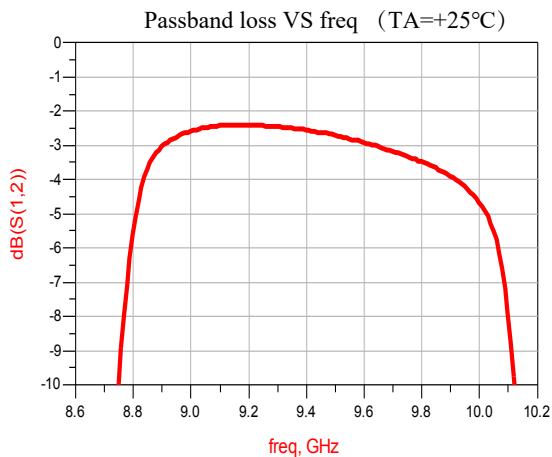
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.3	-	GHz
Passband freq range	8.9	-	9.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.0	-	dB
Return loss	-	21	-	dB
Out-of-band atten	≥40@8.4GHz			dB
	≥40@10.45GHz			dB

Dimensions

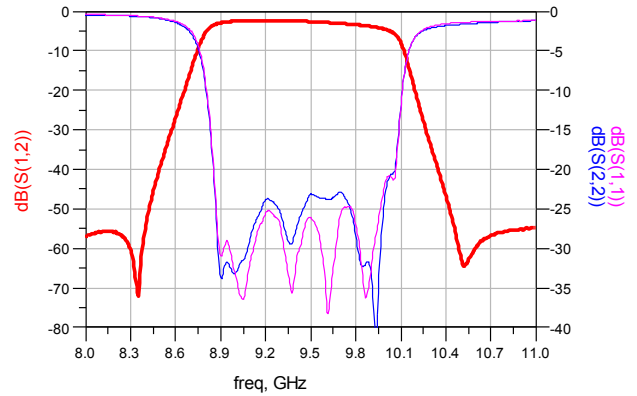


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.4	-	5.5

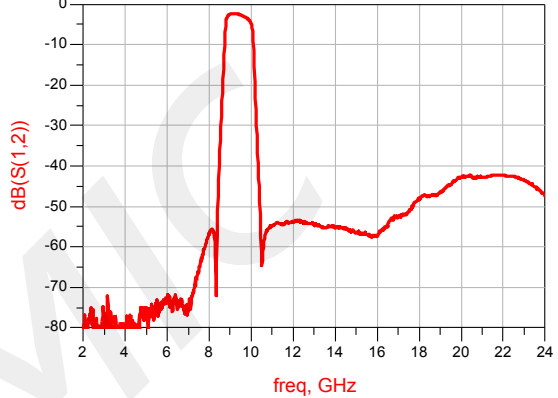
Typical test curve



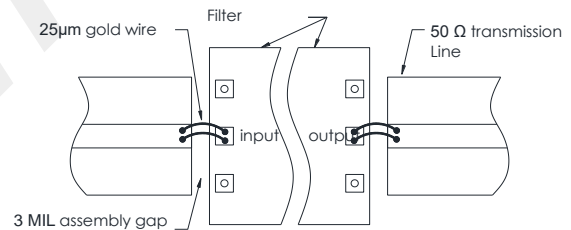
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

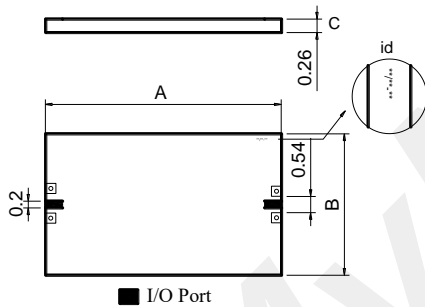
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

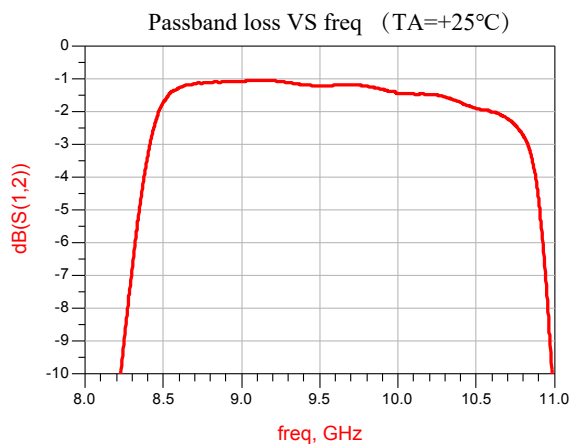
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.4	-	GHz
Passband freq range	8.5	-	10.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@6.9GHz		-	dB
	≥40@11.7GHz		-	dB

Dimensions

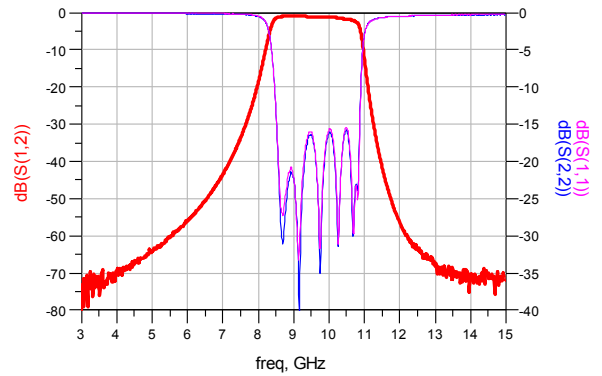


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.1	-	4.2

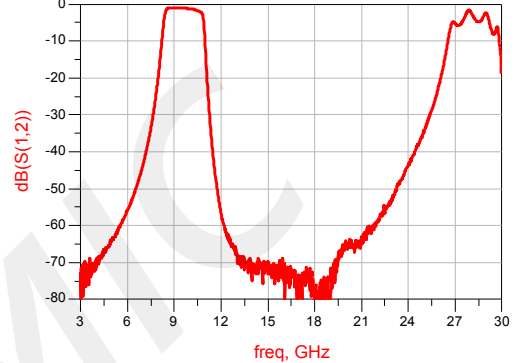
Typical test curve



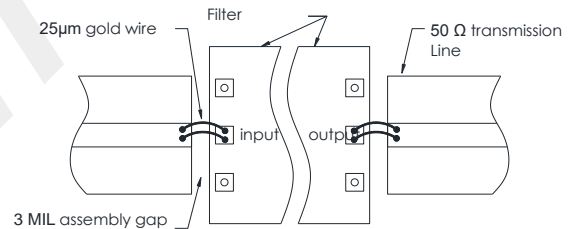
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

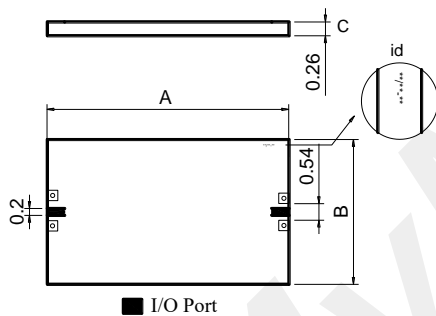
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

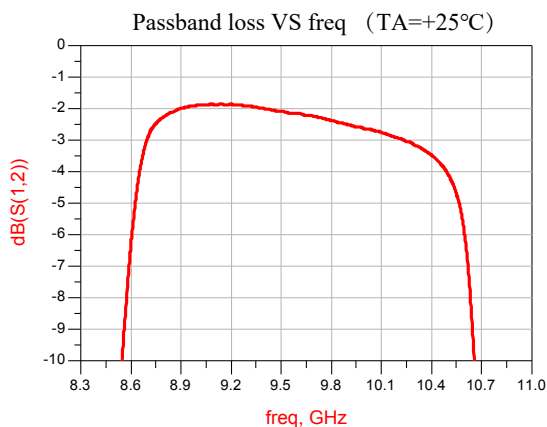
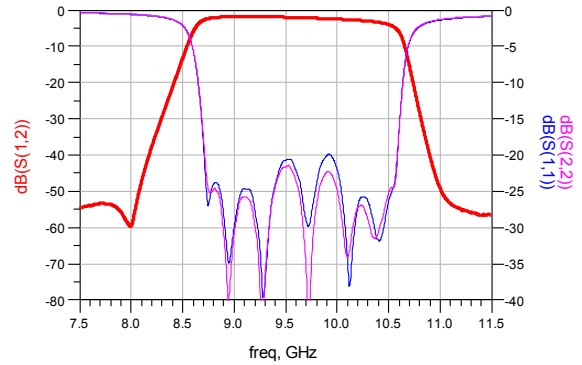
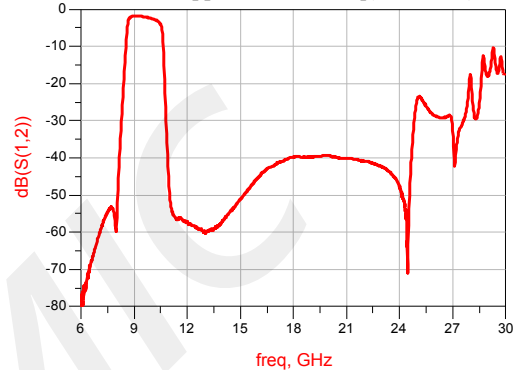
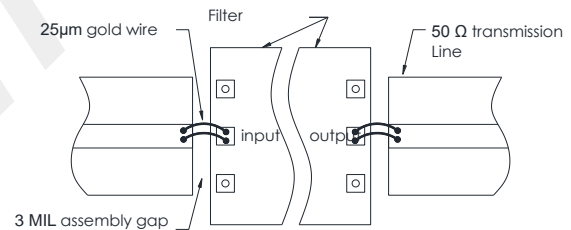
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.45	-	GHz
Passband freq range	8.8	-	10.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@8.1GHz		-	dB
	≥40@11.0GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	5.1	-	5.2

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
<p>Dimensions: 0.25, 0.43, 0.63, 0.78, 1.84</p>	<p>Dimensions: 0.29, 0.31, 0.66, 0.55, 1.3</p>
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

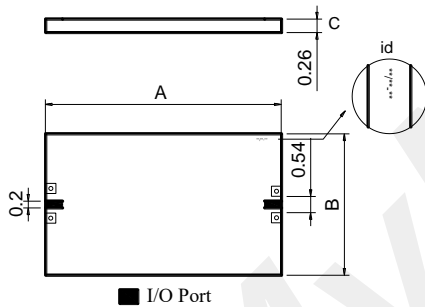
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

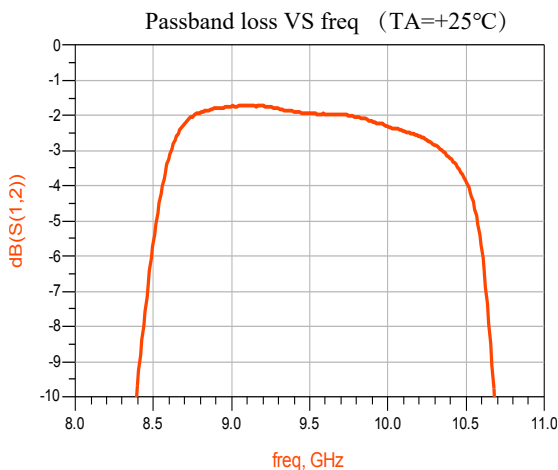
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.45	-	GHz
Passband freq range	8.7	-	10.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@7.3GHz			dB
	≥40@11.3GHz			dB

Dimensions

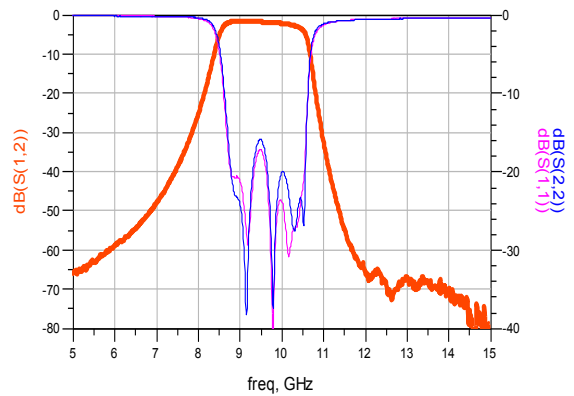


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.1	-	4.2

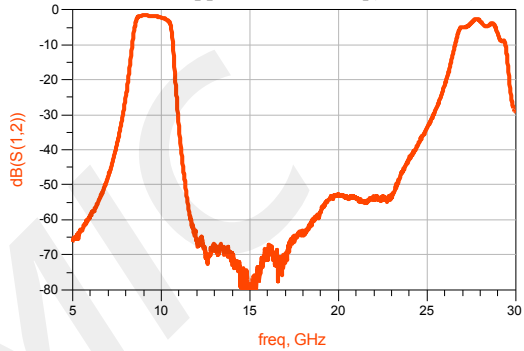
Typical test curve



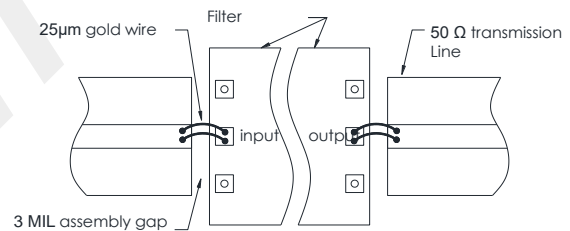
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

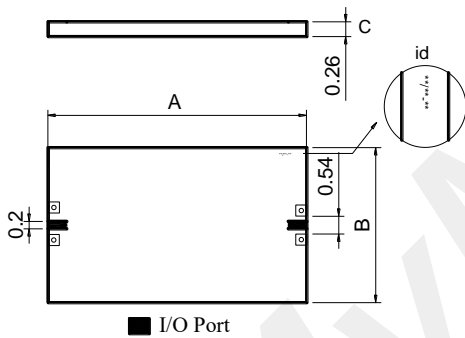
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

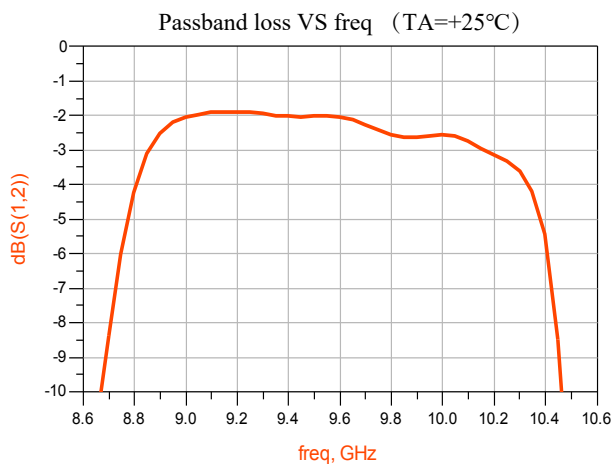
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.5	-	GHz
Passband freq range	8.9	-	10.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@7.7GHz			dB
	≥40@11GHz			dB

Dimensions

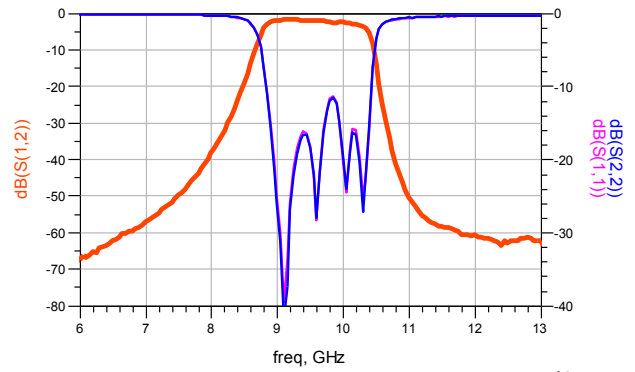


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.9	-	4

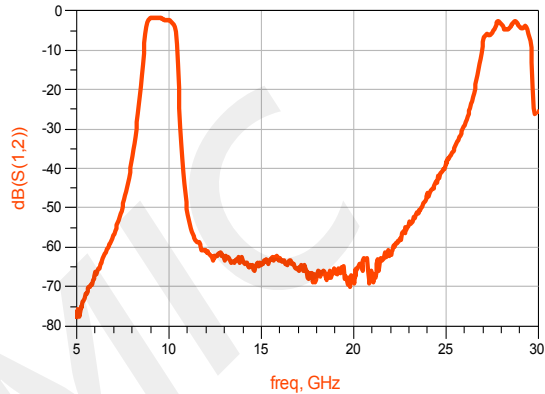
Typical test curve



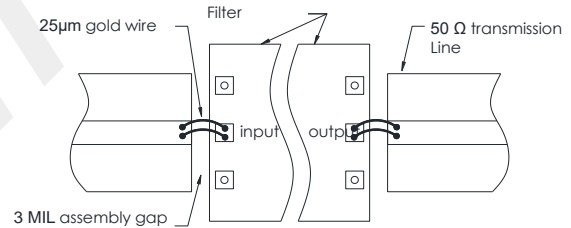
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

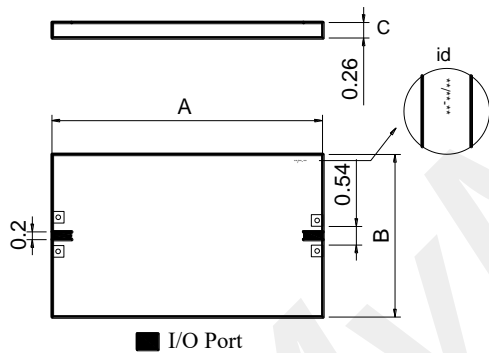
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

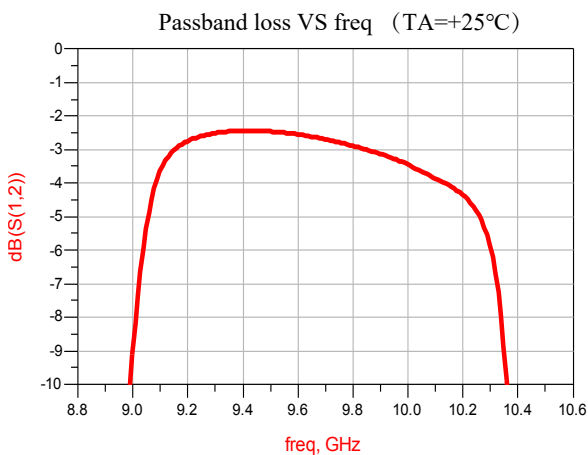
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.6	-	GHz
Passband freq range	9.2	-	9.95	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	23	-	dB
Out-of-band atten	≥40@8.6GHz			dB
	≥40@10.7GHz			dB

Dimensions

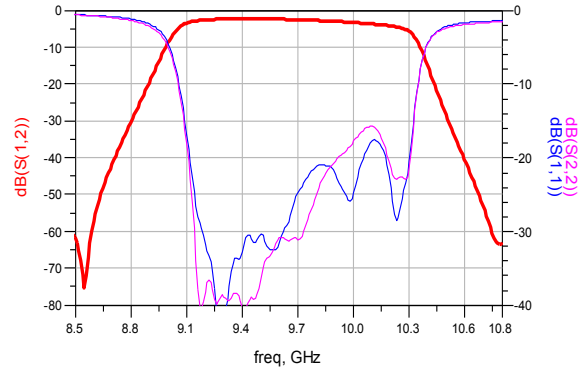


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

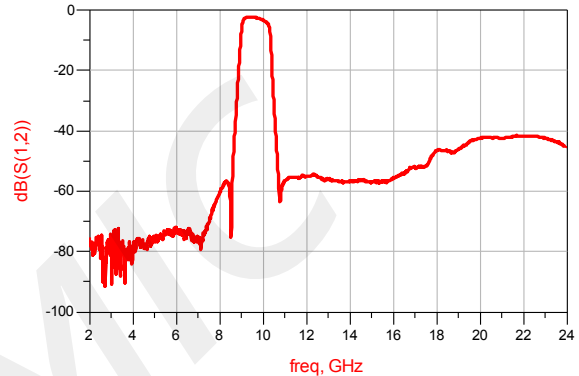
Typical test curve



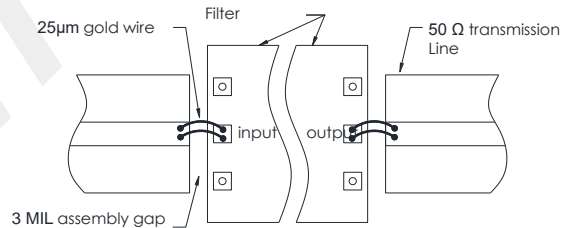
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

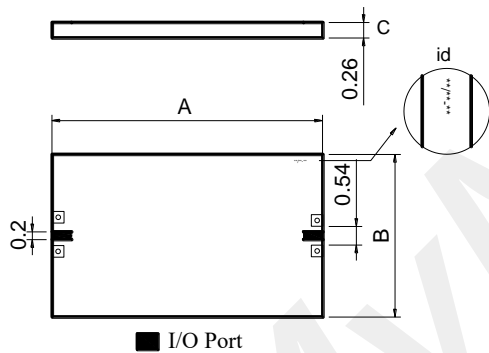
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

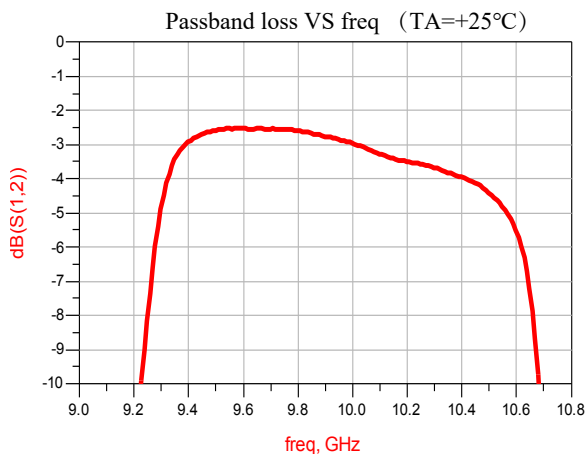
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.8	-	GHz
Passband freq range	9.4	-	10.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.8GHz			dB
	≥40@10.95GHz			dB

Dimensions

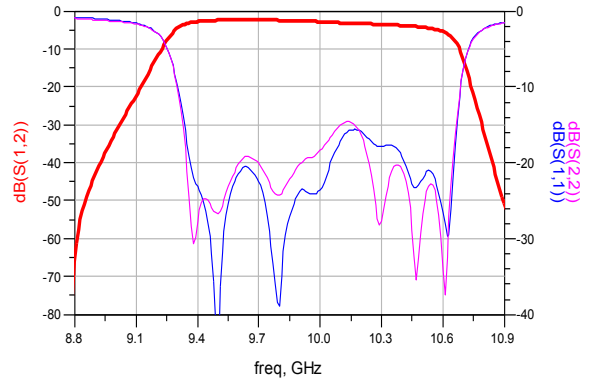


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

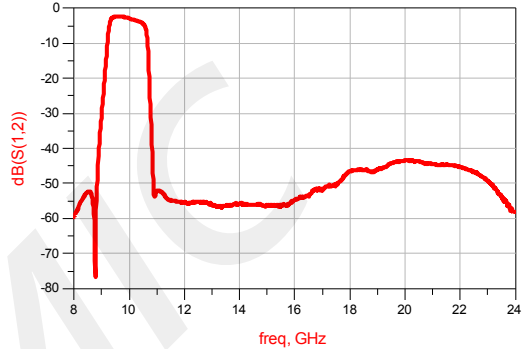
Typical test curve



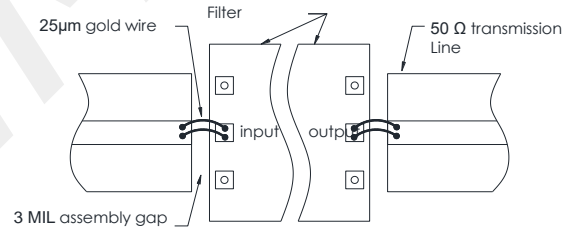
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

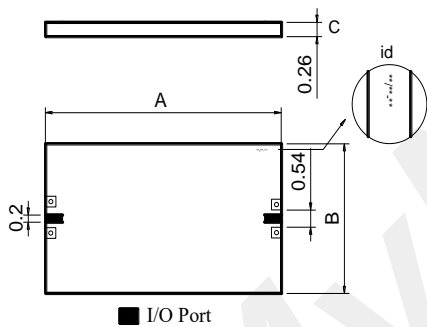
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

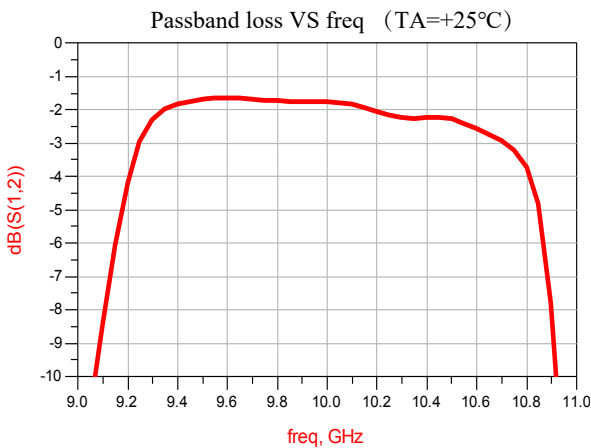
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.9	-	GHz
Passband freq range	9.3	-	10.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@8.0GHz			dB
	≥40@11.4GHz			dB

Dimensions

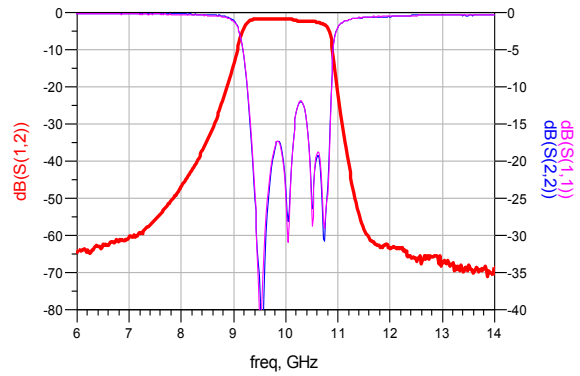


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.7	-	3.8

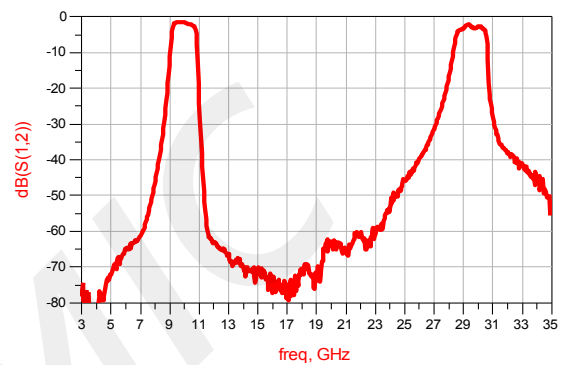
Typical test curve



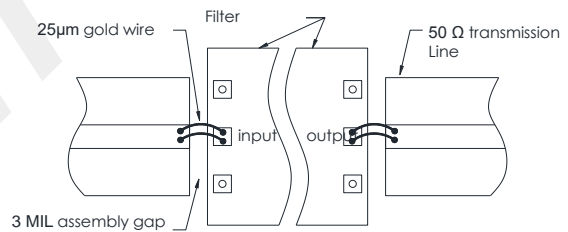
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

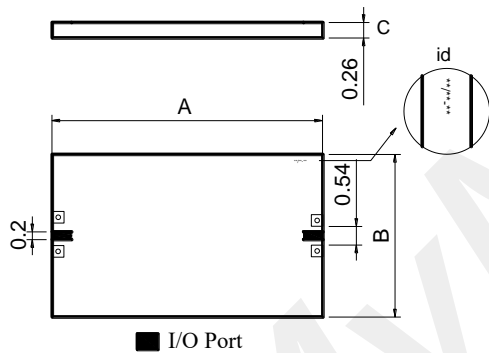
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

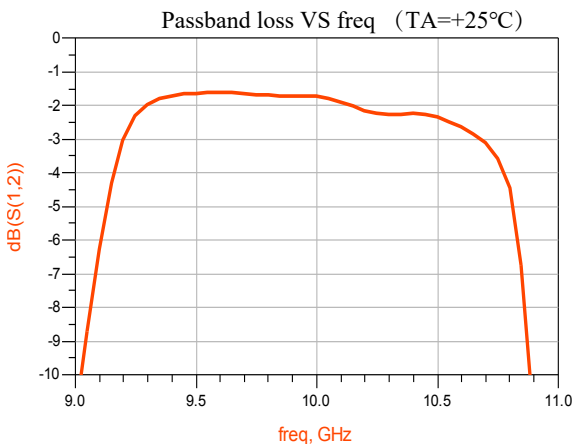
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.9	-	GHz
Passband freq range	9.25	-	10.55	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@8.0GHz			dB
	≥40@11.4GHz			dB

Dimensions

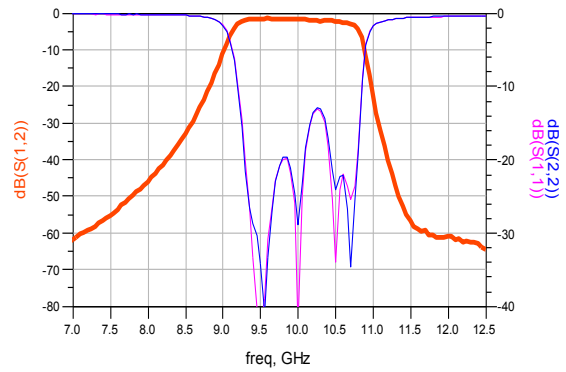


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.7	-	3.8

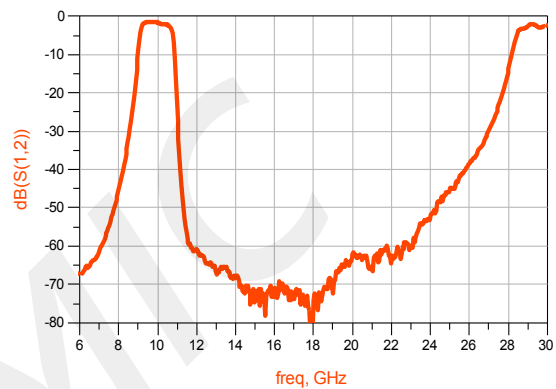
Typical test curve



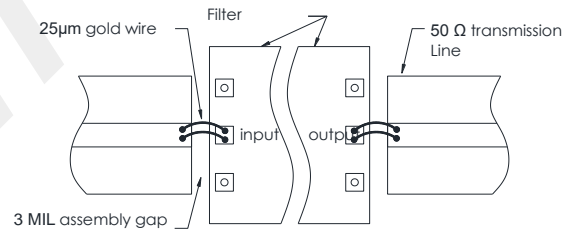
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

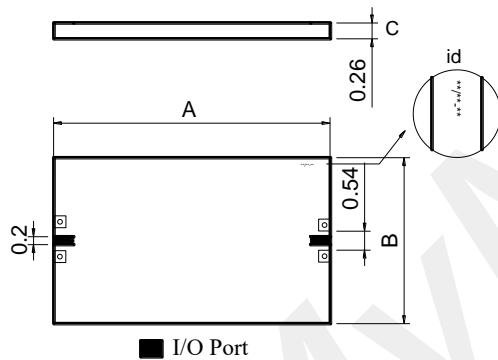
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

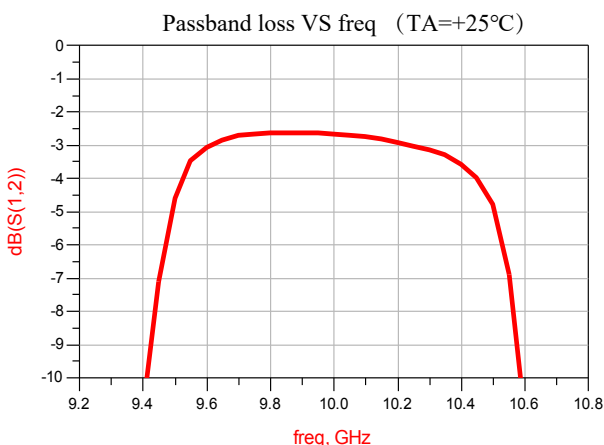
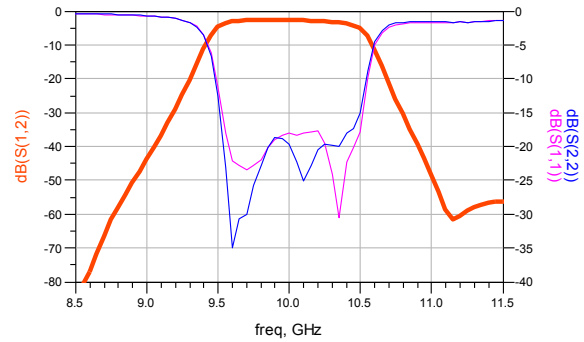
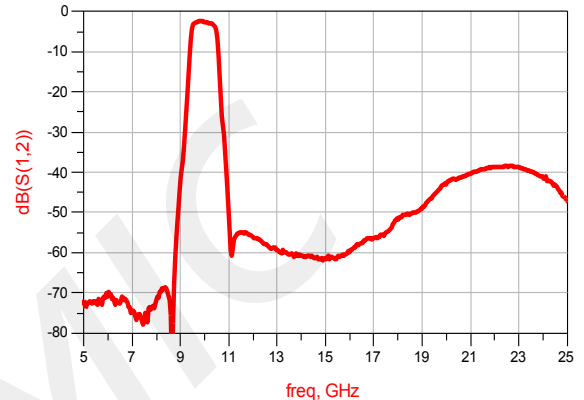
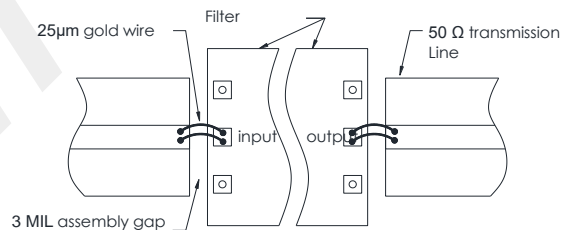
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.95	-	GHz
Passband freq range	9.55	-	10.35	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@8.9GHz			dB
	≥40@11GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	4.7	-	4.8

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

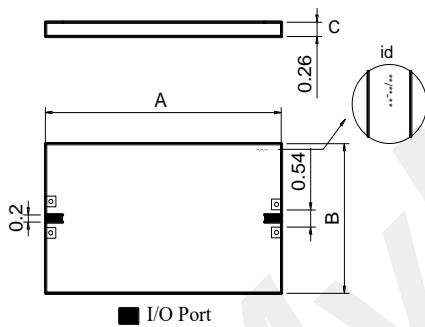
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

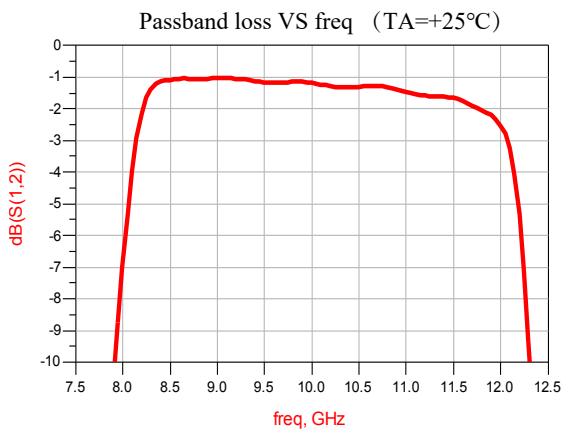
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	9.95	-	GHz
Passband freq range	8.3	-	11.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@6.4GHz		-	dB
	≥40@13.2GHz		-	dB

Dimensions

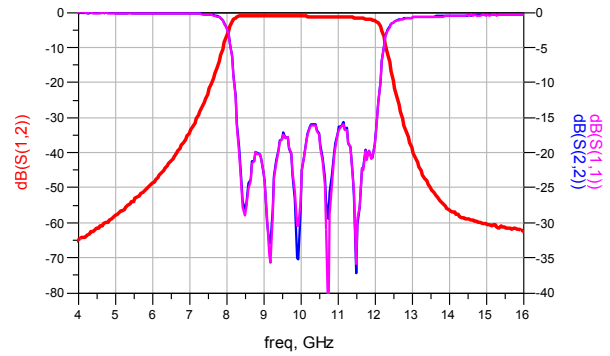


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.1	-	4.2

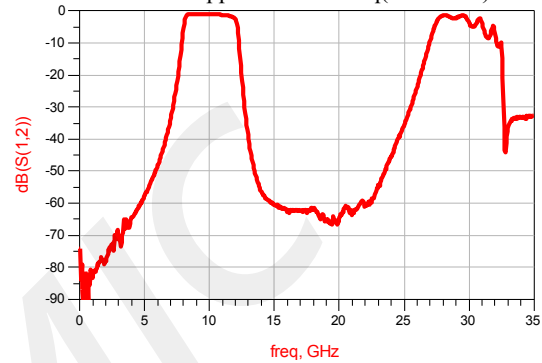
Typical test curve



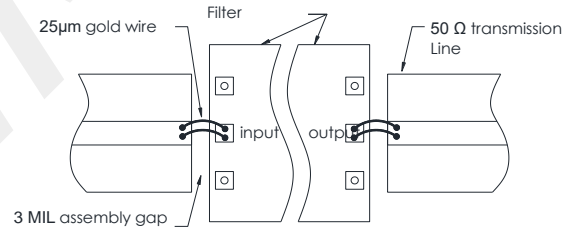
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

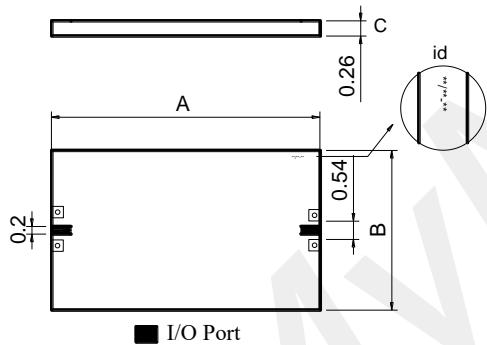
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

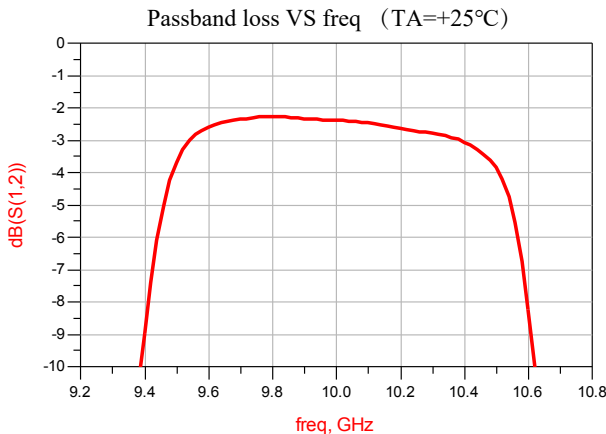
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10	-	GHz
Passband freq range	9.6	-	10.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.8GHz		-	dB
	≥40@11.05GHz		-	dB

Dimensions

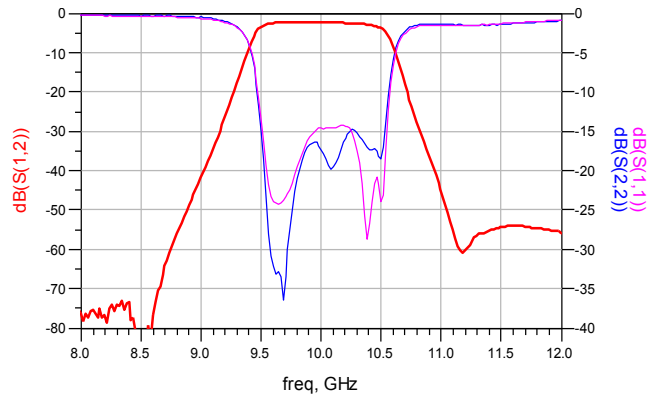


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	4.7	-	4.8

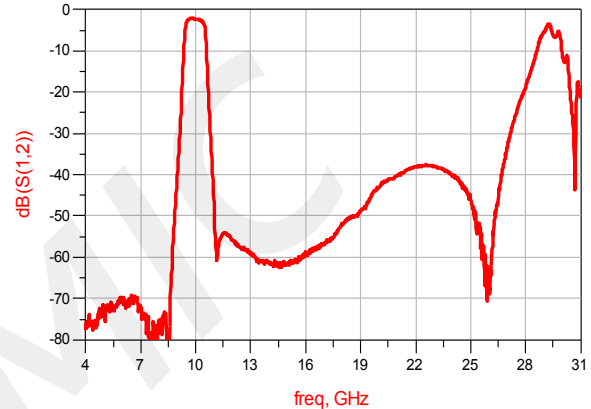
Typical test curve



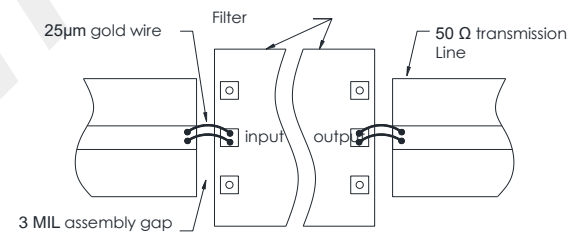
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

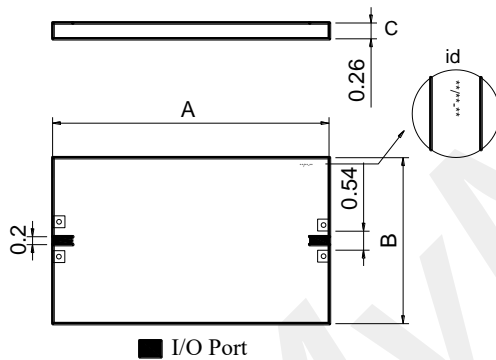
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

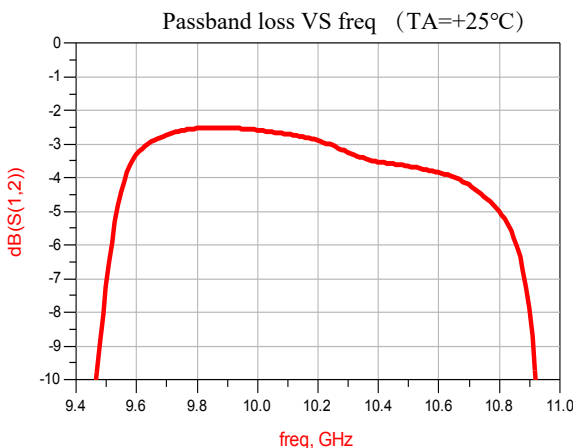
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10	-	GHz
Passband freq range	9.65	-	10.35	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@9.0GHz			dB
	≥40@11.2GHz			dB

Dimensions

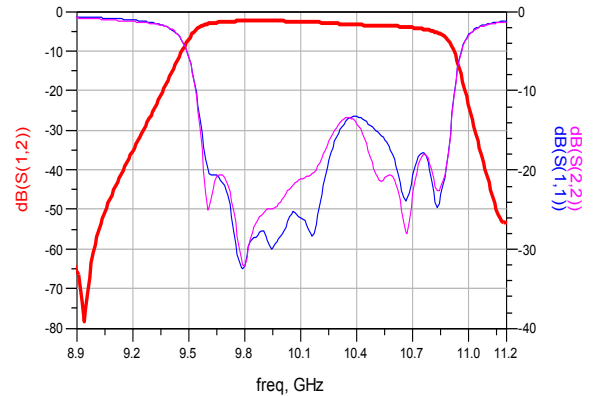


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.4	-	5.5

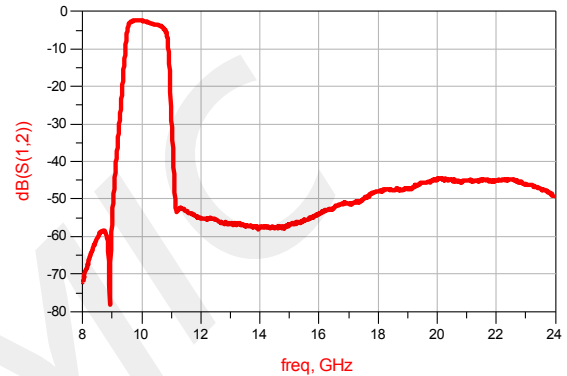
Typical test curve



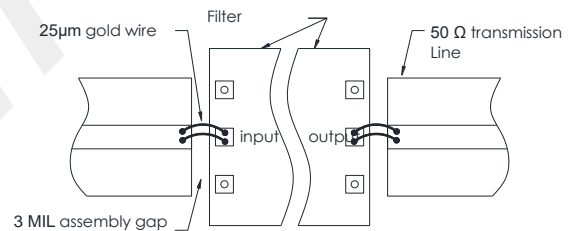
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

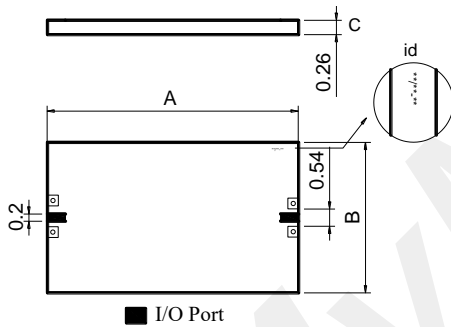
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

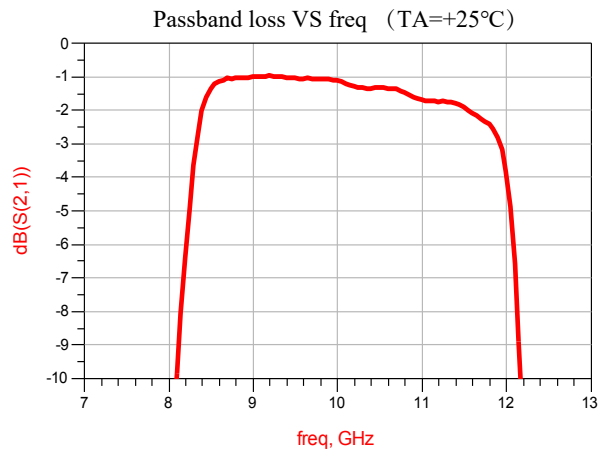
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.05	-	GHz
Passband freq range	8.5	-	11.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@6.65GHz			dB
	≥40@13.0GHz			dB

Dimensions

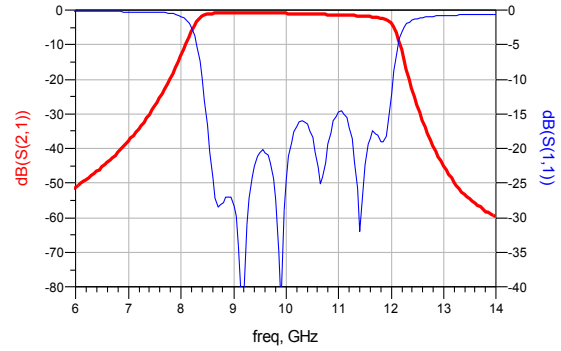


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.1	-	4.2

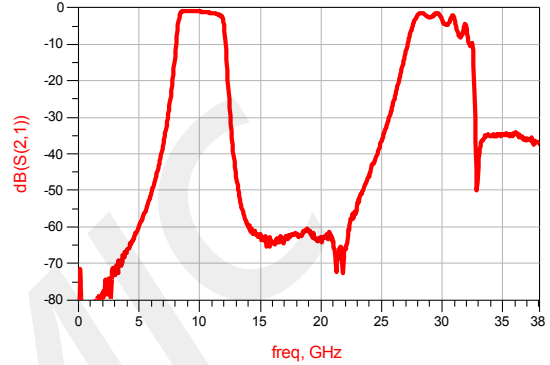
Typical test curve



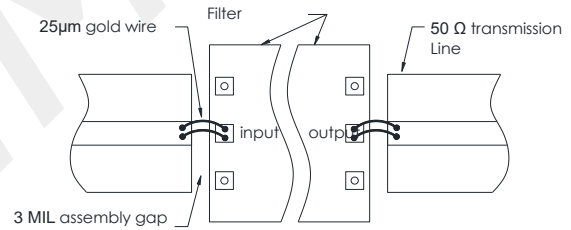
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

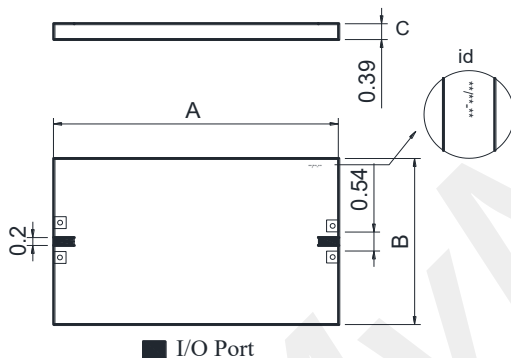
- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

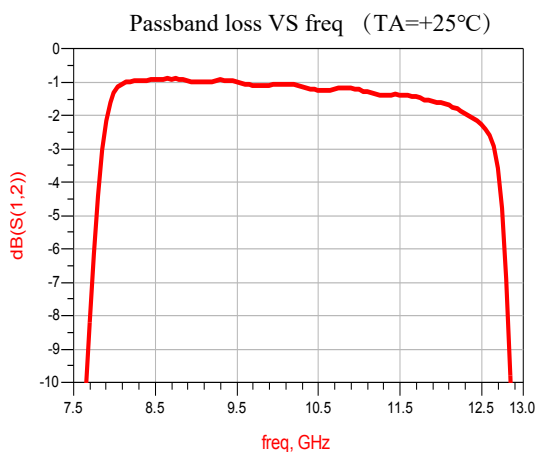
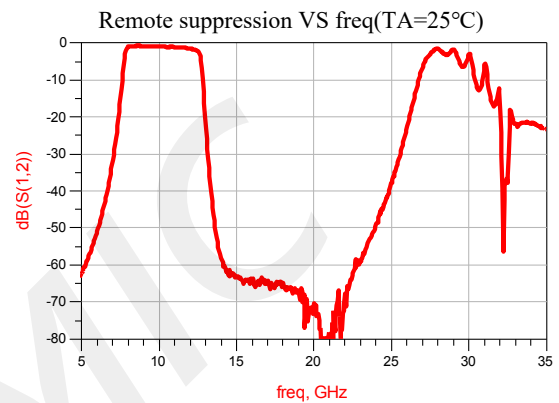
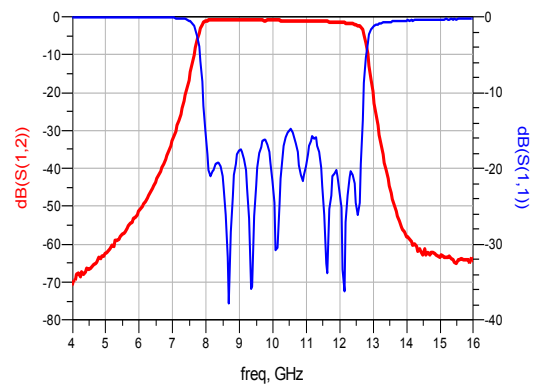
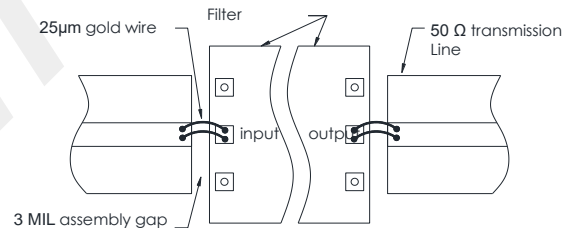
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.05	-	GHz
Passband freq range	7.95	-	12.15	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@6.4GHz			dB
	≥40@13.6GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.9	-	4

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

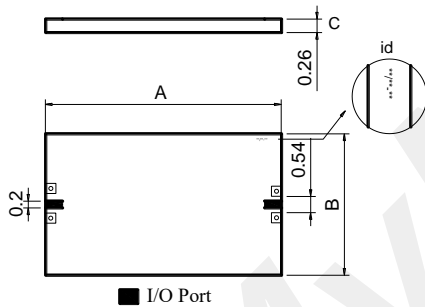
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

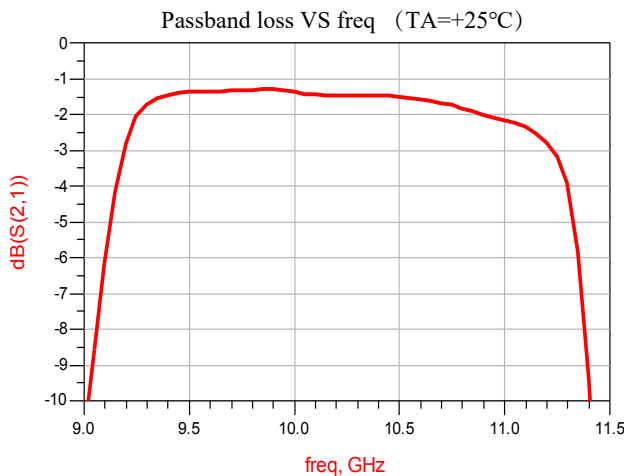
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.15	-	GHz
Passband freq range	9.3	-	11	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.0GHz			dB
	≥40@12.0GHz			dB

Dimensions

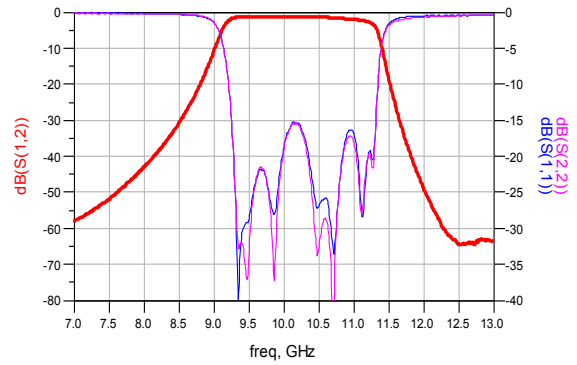


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.8	-	3.9

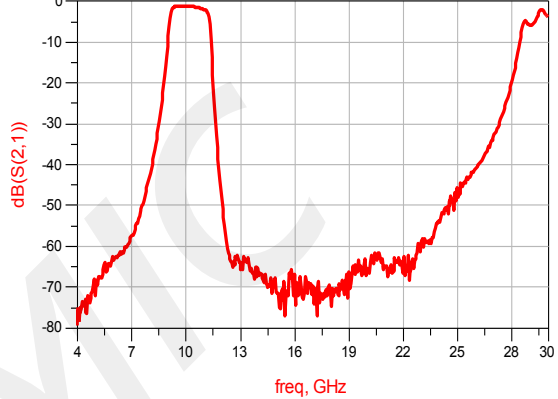
Typical test curve



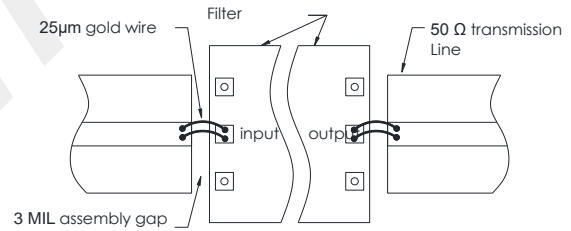
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

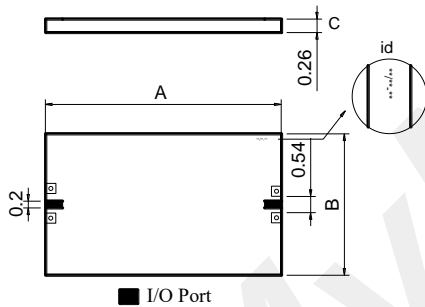
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

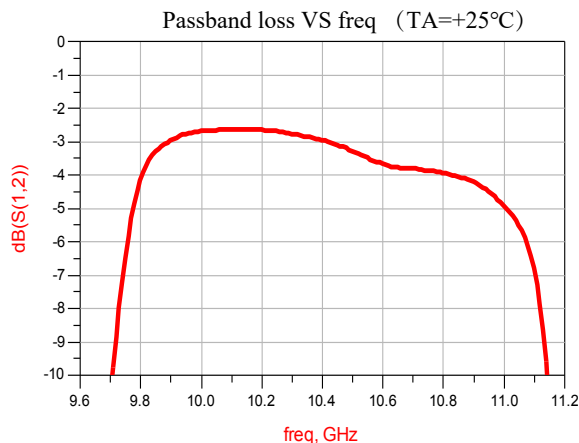
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.2	-	GHz
Passband freq range	9.85	-	10.55	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@9.25GHz		-	dB
	≥40@11.45GHz		-	dB

Dimensions

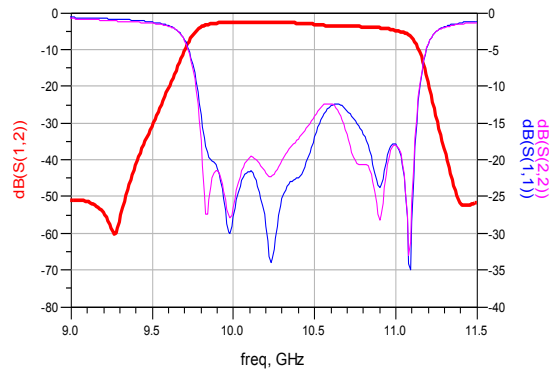


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	5.4	-	5.5

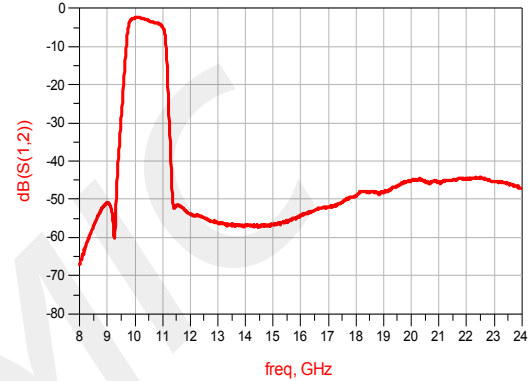
Typical test curve



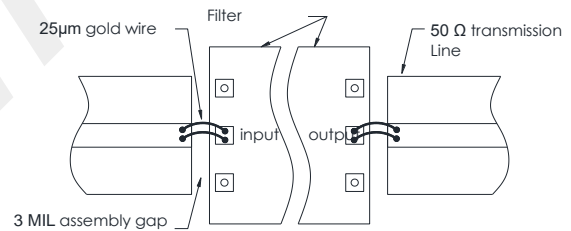
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

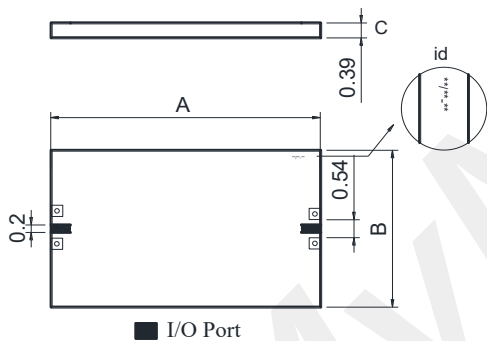
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

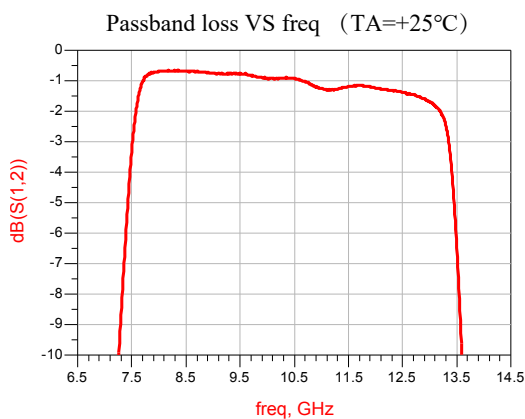
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.2	-	GHz
Passband freq range	7.7	-	12.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@5.6GHz		-	dB
	≥40@14.8GHz		-	dB

Dimensions

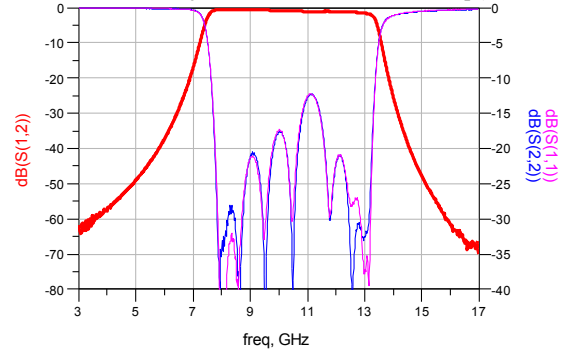


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	3.9	-	4.0

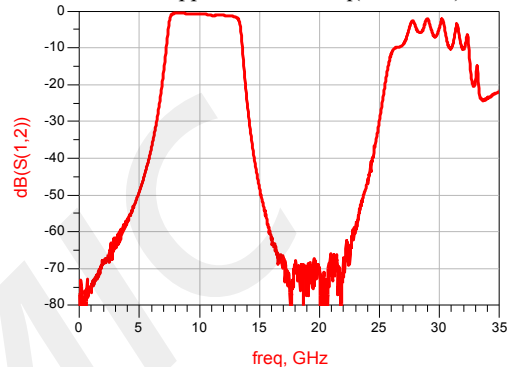
Typical test curve



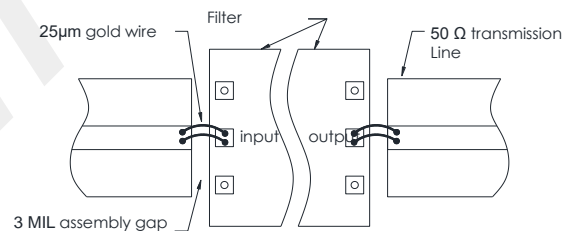
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

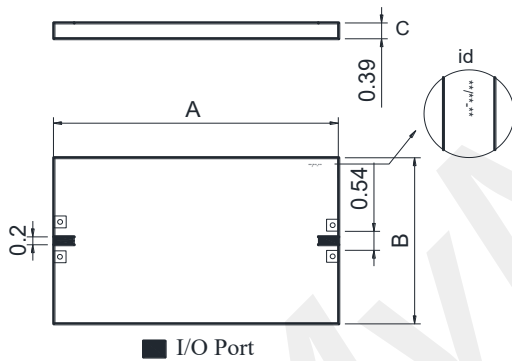
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

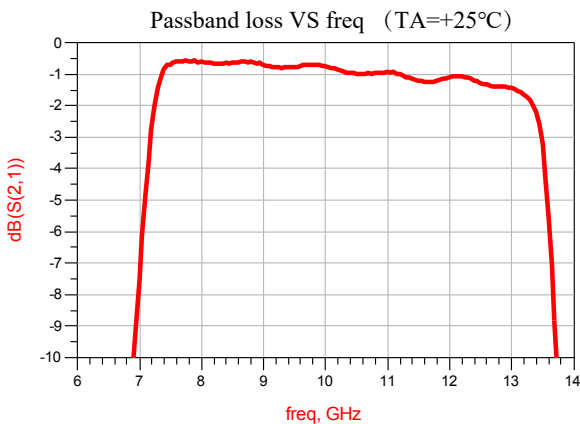
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.25	-	GHz
Passband freq range	7.4	-	13.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.3	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@5GHz			dB
	≥40@15.1GHz			dB

Dimensions

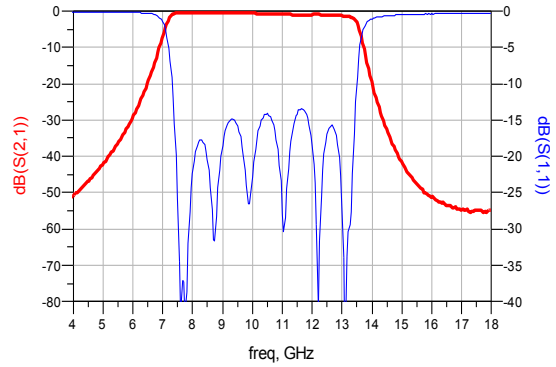


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	4.4	-	4.5

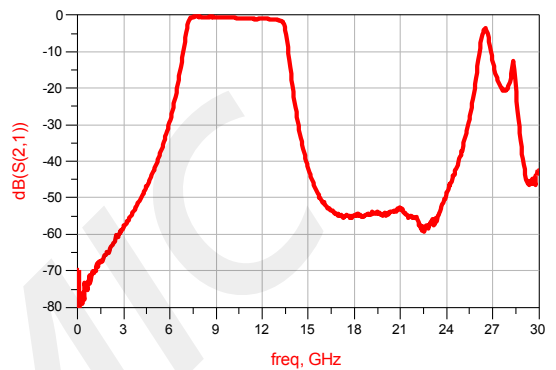
Typical test curve



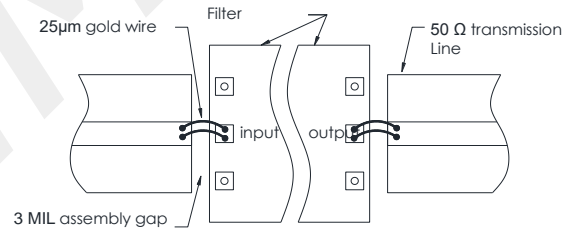
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

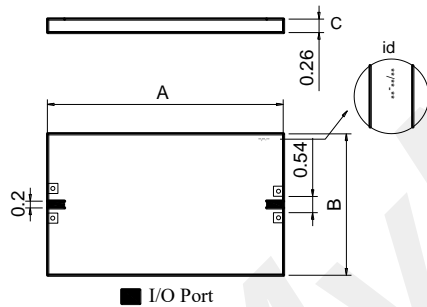
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

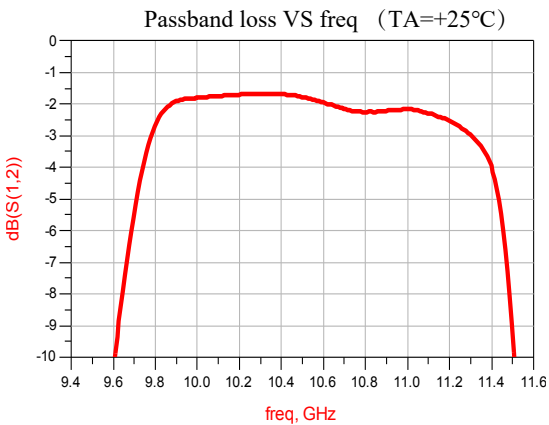
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.3	-	GHz
Passband freq range	9.9	-	10.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@8.5GHz			dB
	≥40@12.0GHz			dB

Dimensions

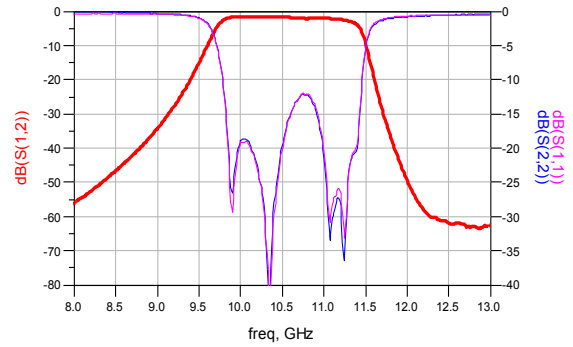


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.9	-	4

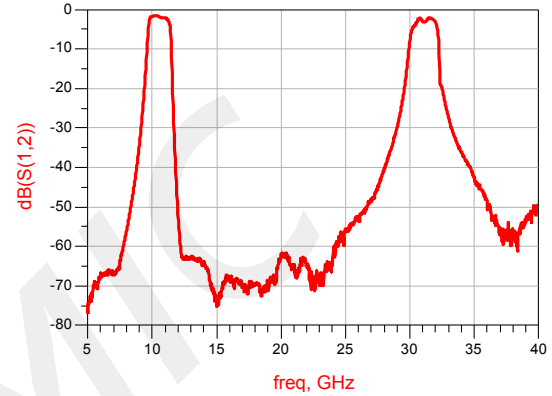
Typical test curve



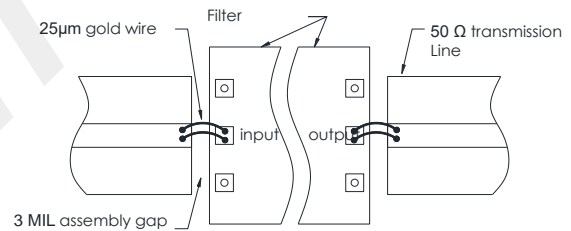
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

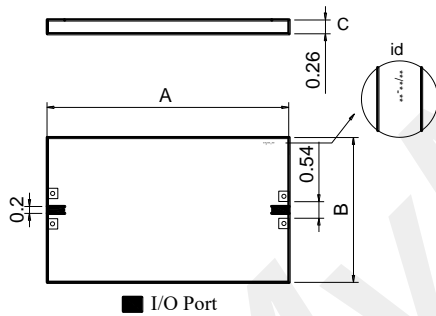
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

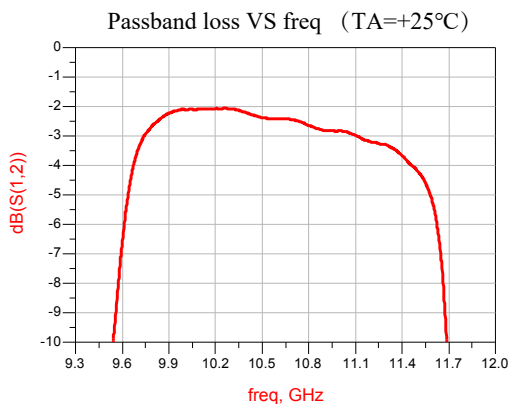
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.4	-	GHz
Passband freq range	9.8	-	11.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.9GHz		-	dB
	≥40@12.1GHz		-	dB

Dimensions

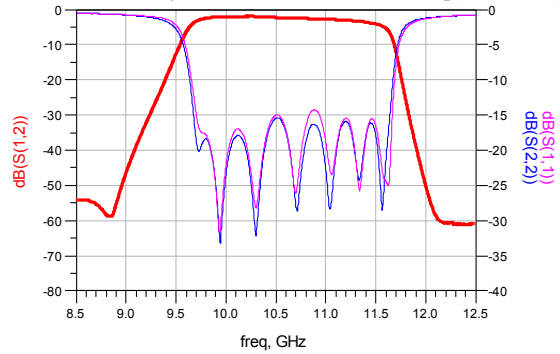


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	4.9	-	5.0

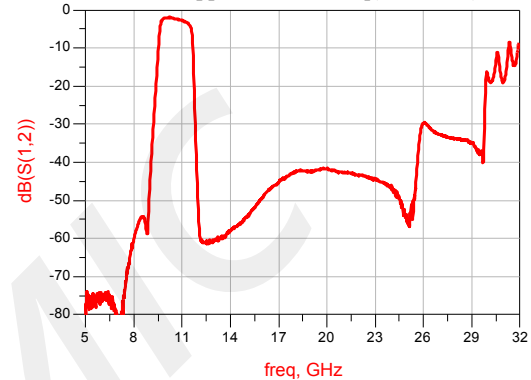
Typical test curve



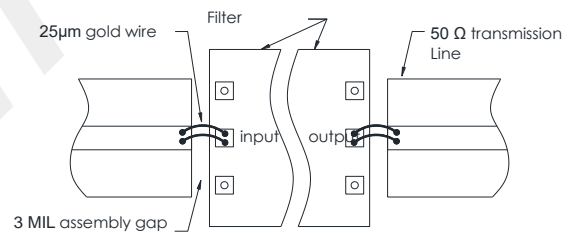
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

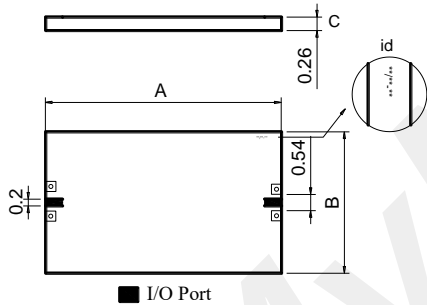
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

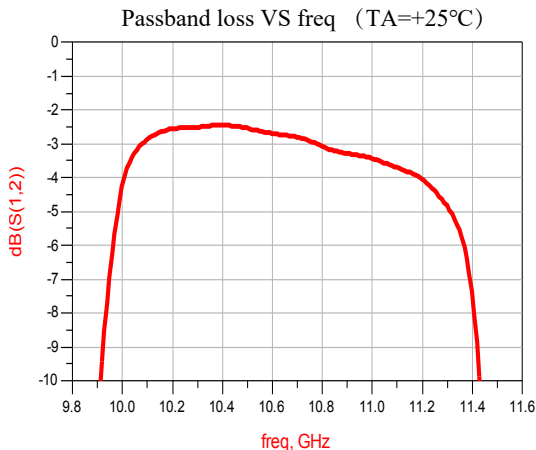
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.5	-	GHz
Passband freq range	10.1	-	10.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@9.4GHz			dB
	≥40@11.8GHz			dB

Dimensions

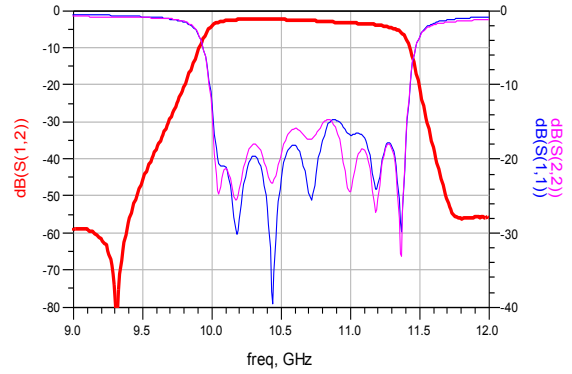


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

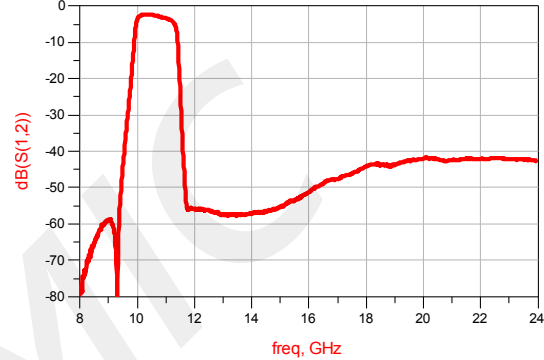
Typical test curve



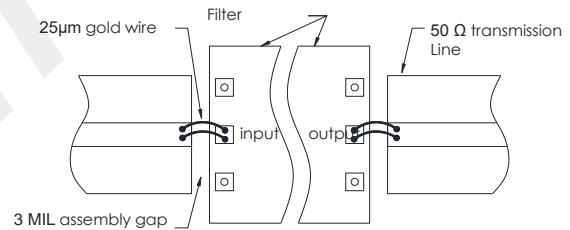
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

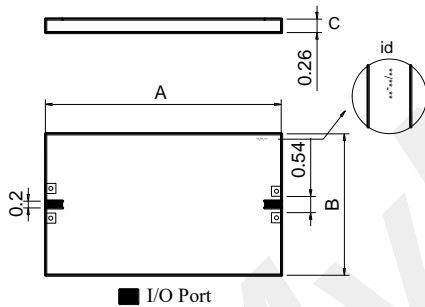
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

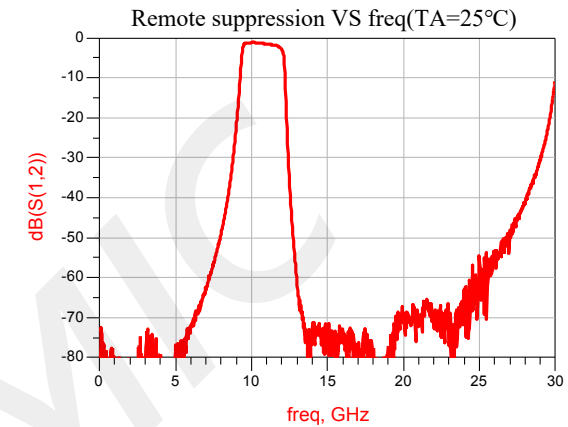
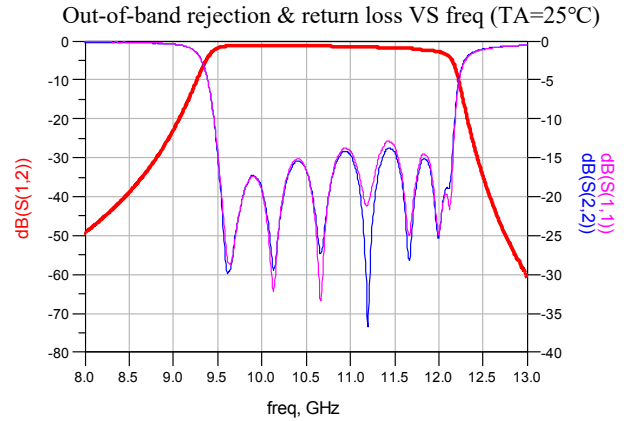
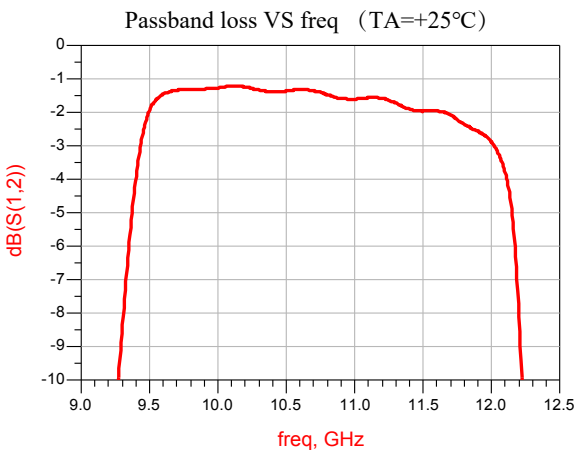
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.6	-	GHz
Passband freq range	9.5	-	11.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.2GHz			dB
	≥40@12.75GHz			dB

Dimensions

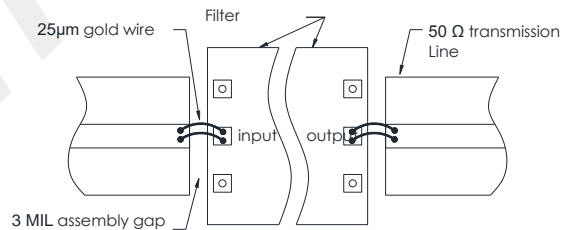


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.9	-	4

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

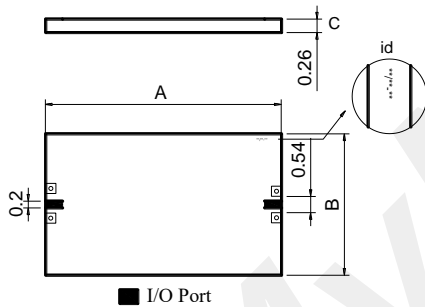
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

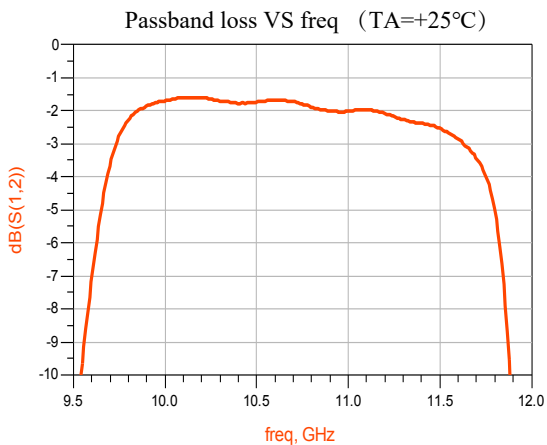
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.65	-	GHz
Passband freq range	9.8	-	11.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.6GHz		-	dB
	≥40@12.3GHz		-	dB

Dimensions

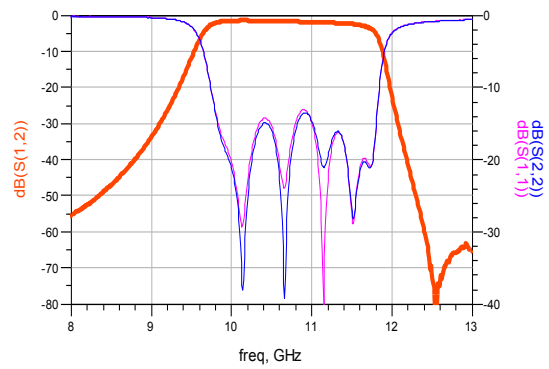


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.9	-	4

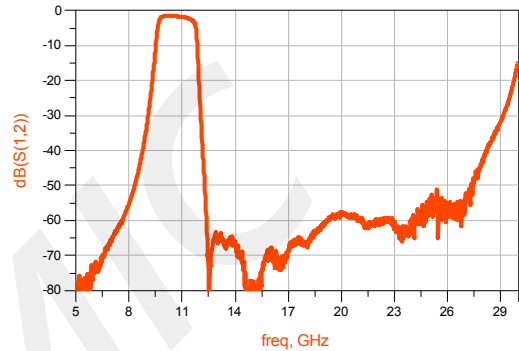
Typical test curve



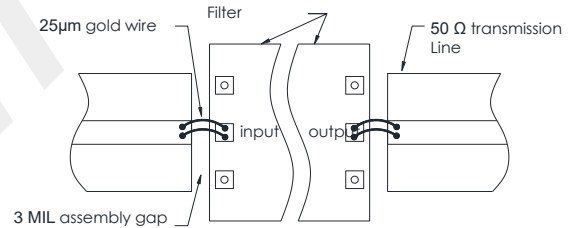
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

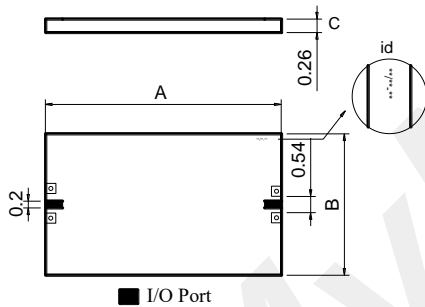
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

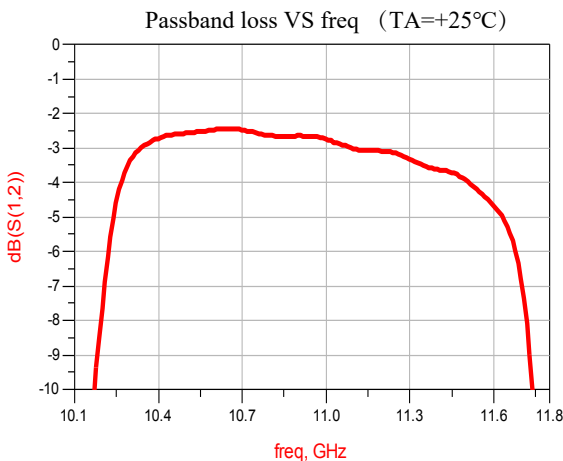
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.8	-	GHz
Passband freq range	10.35	-	11.25	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@9.7GHz		-	dB
	≥40@12.0GHz		-	dB

Dimensions

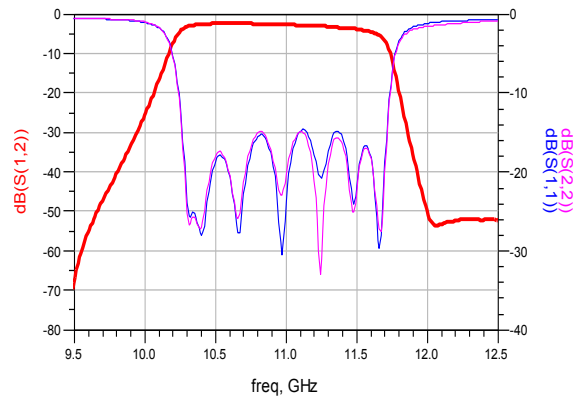


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

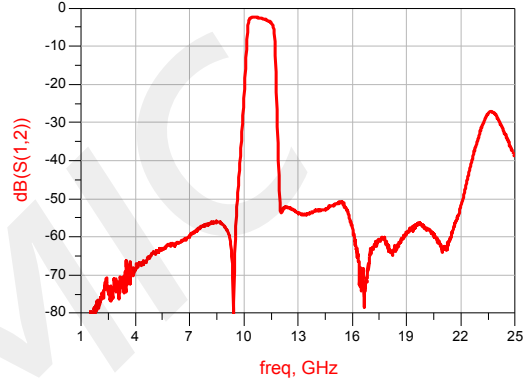
Typical test curve



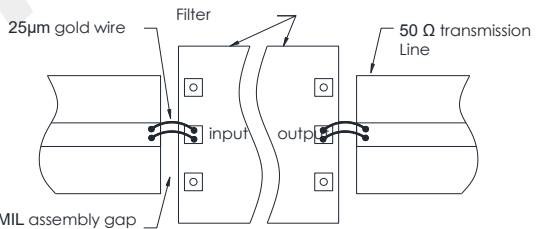
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

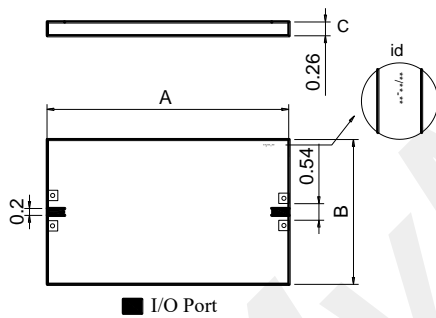
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

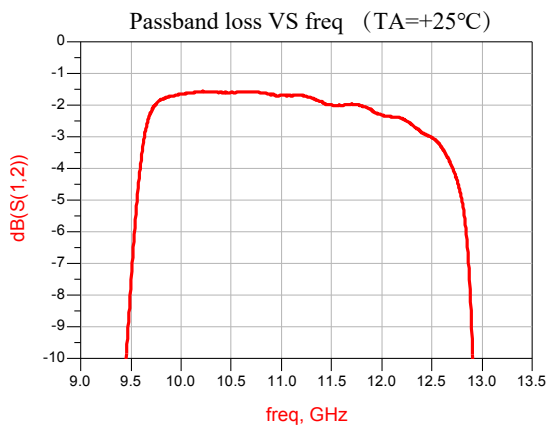
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.9	-	GHz
Passband freq range	9.7	-	12.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@8.4GHz		-	dB
	≥40@13.25GHz		-	dB

Dimensions

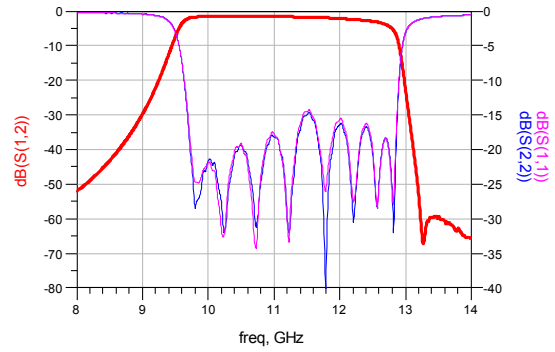


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	3.5	-	3.6

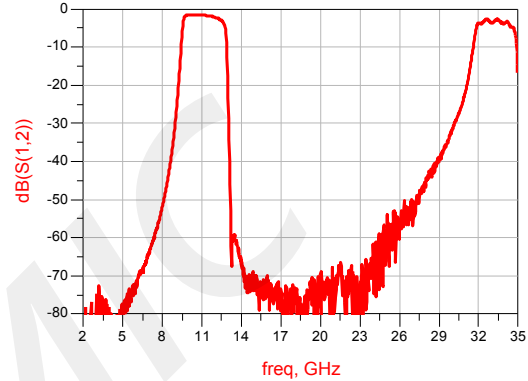
Typical test curve



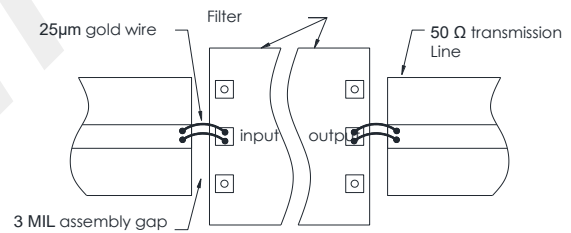
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

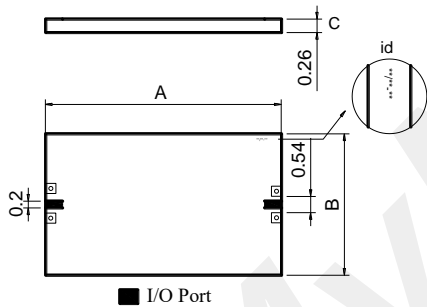
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

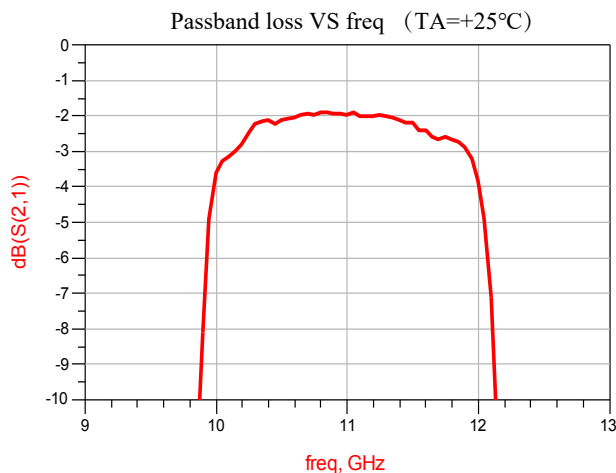
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	10.95	-	GHz
Passband freq range	10.25	-	11.65	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@9.4GHz			dB
	≥40@12.65GHz			dB

Dimensions

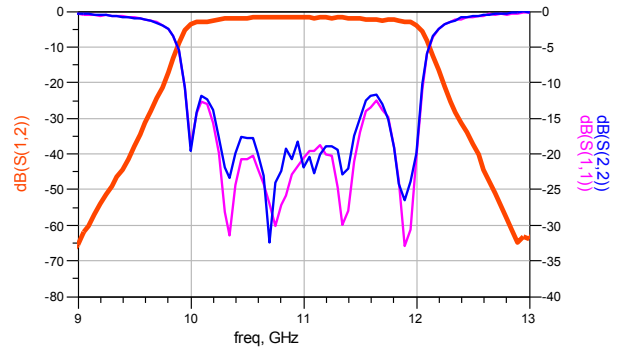


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.6	-	3.7

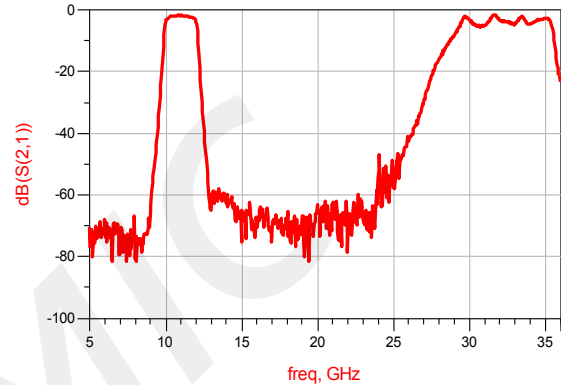
Typical test curve



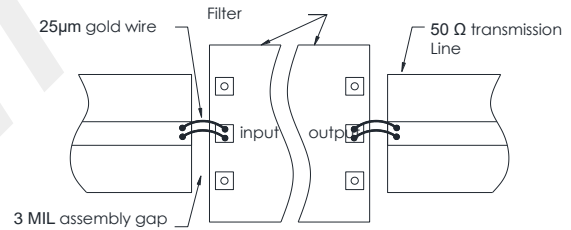
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

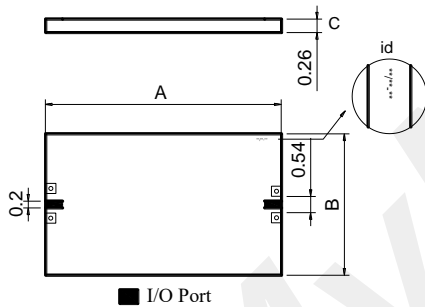
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11	-	GHz
Passband freq range	10	-	12	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@8.0GHz			dB
	≥40@13.4GHz			dB

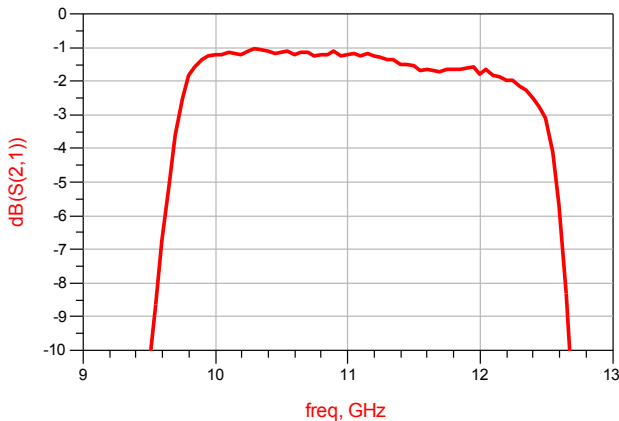
Dimensions



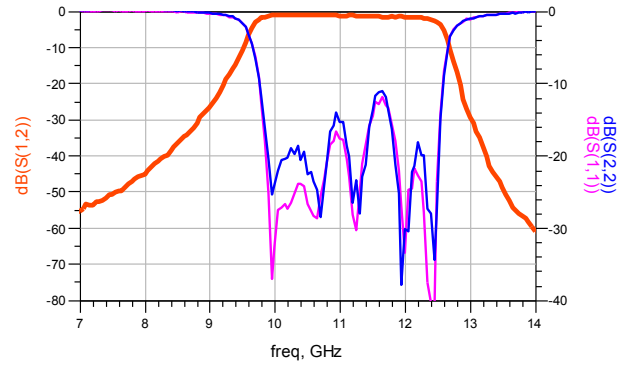
Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	3.7	-	3.8

Typical test curve

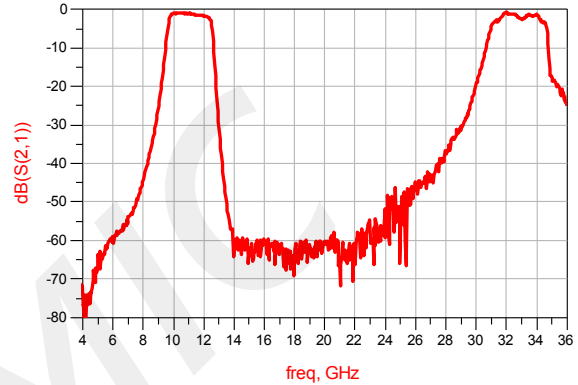
Passband loss VS freq 25°C)



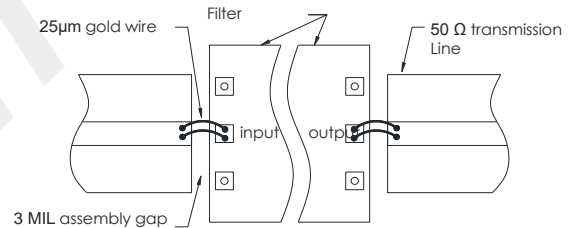
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

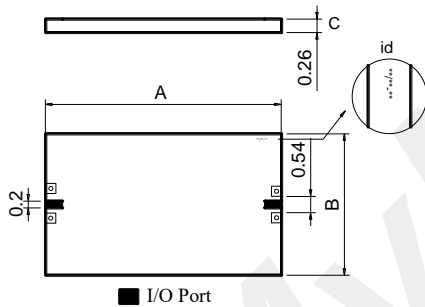
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

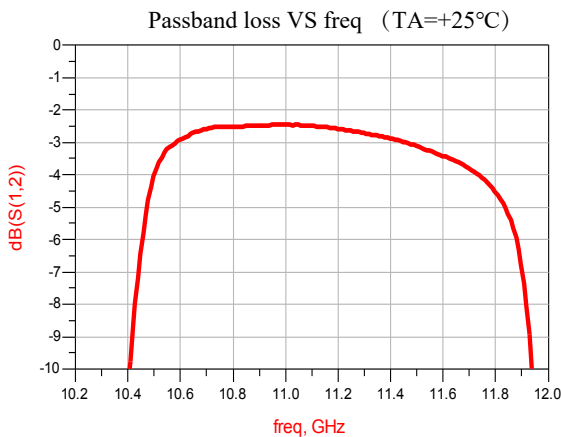
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11.025	-	GHz
Passband freq range	10.55	-	11.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@9.9GHz			dB
	≥40@12.3GHz			dB

Dimensions

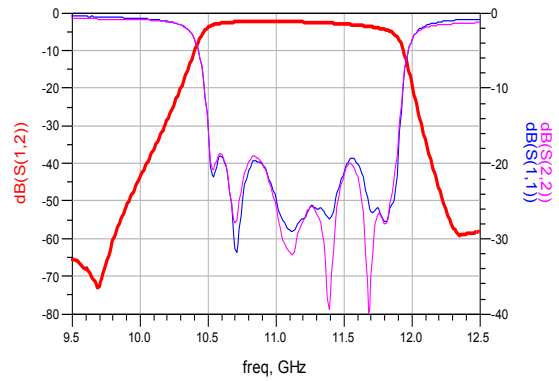


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

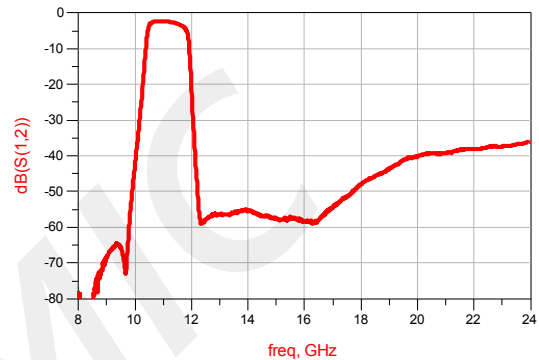
Typical test curve



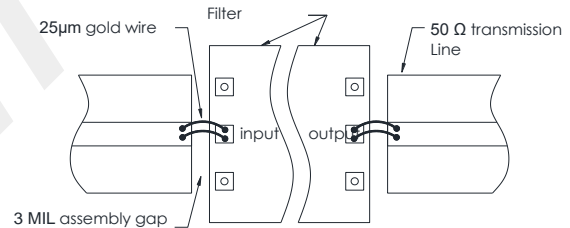
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

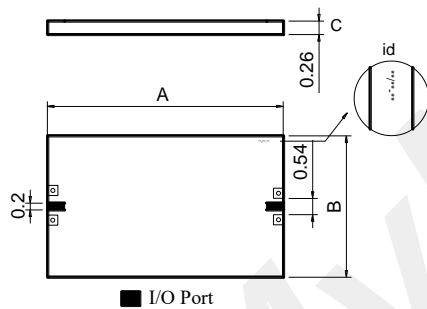
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

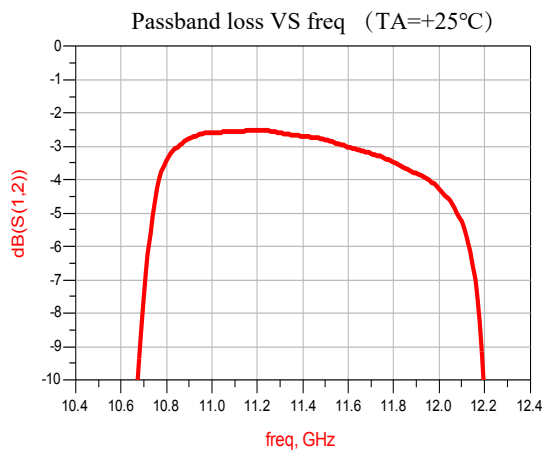
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11.3	-	GHz
Passband freq range	10.85	-	11.75	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@10.2GHz			dB
	≥40@12.5GHz			dB

Dimensions

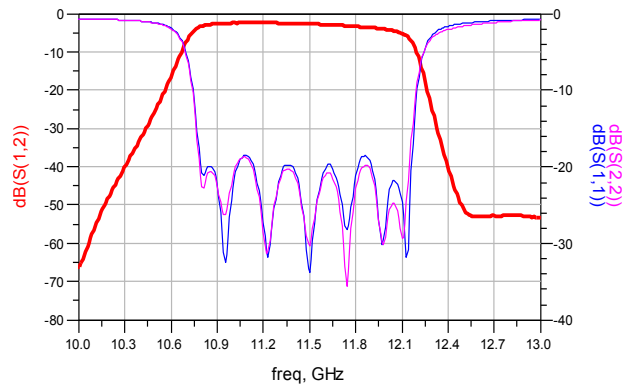


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	5.4	-	5.5

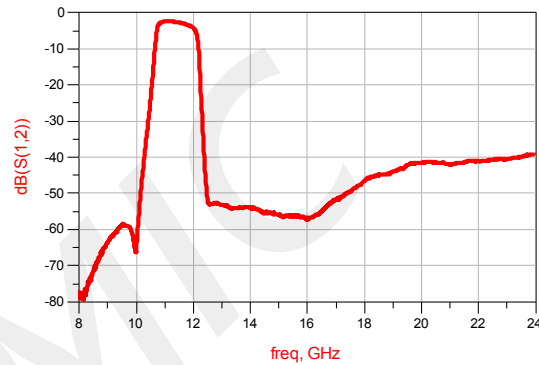
Typical test curve



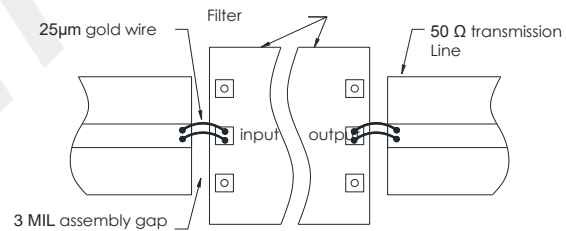
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

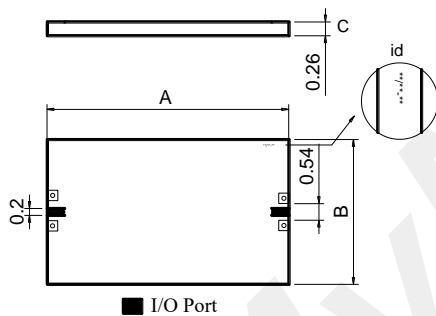
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

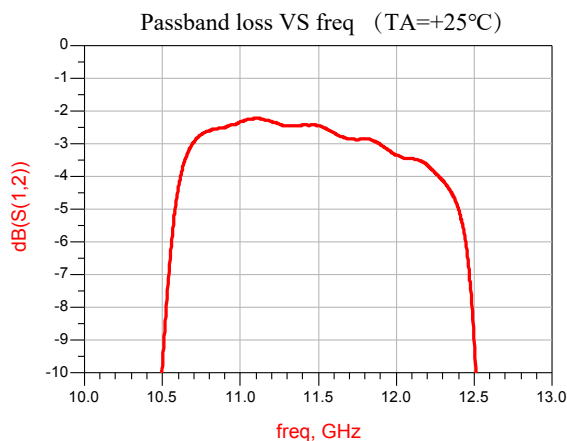
Items	Min	Typ	Max	I b h
Center Freq(f ₀)	-	11.3	-	GHz
Passband freq range	10.7	-	11.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@9.9GHz		-	dB
	≥40@12.9GHz		-	dB

Dimensions

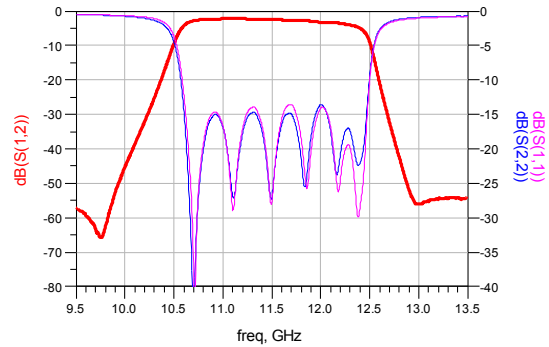


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	4.6	-	4.7

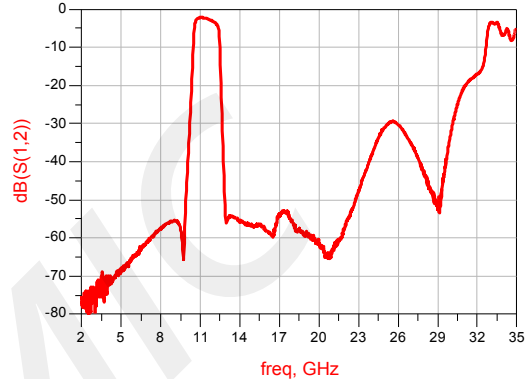
Typical test curve



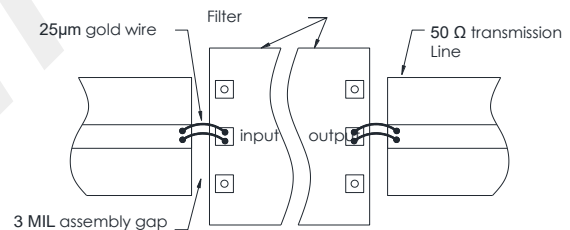
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

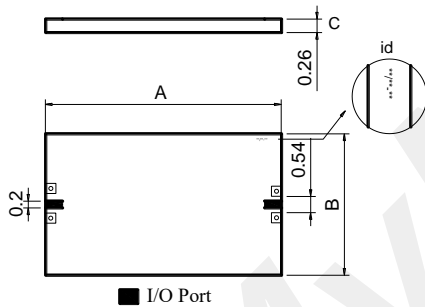
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

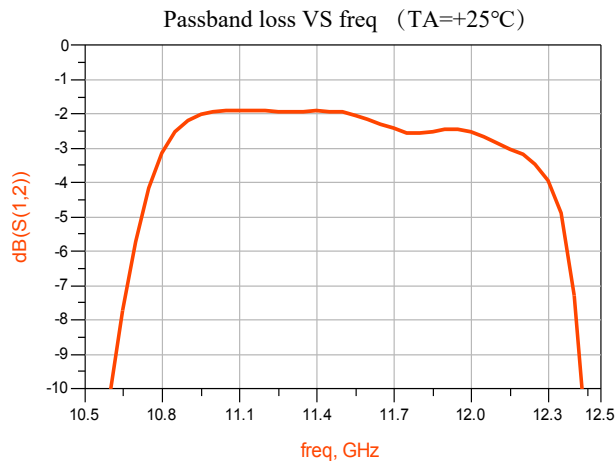
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11.45	-	GHz
Passband freq range	10.85	-	12.05	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@9.5GHz		-	dB
	≥40@12.85GHz		-	dB

Dimensions

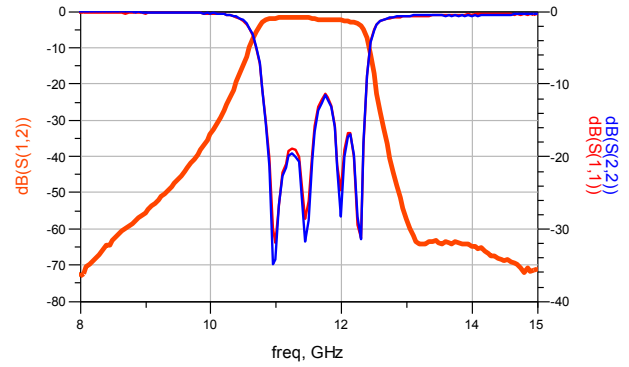


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.4	-	3.5

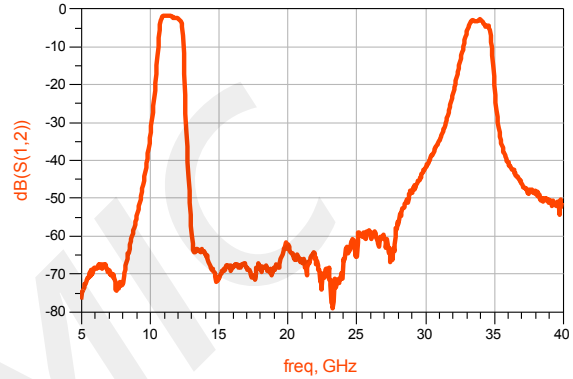
Typical test curve



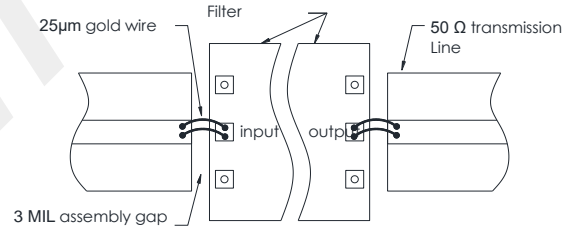
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

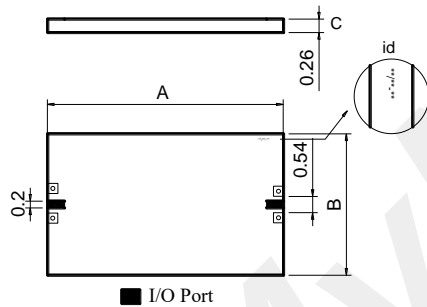
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

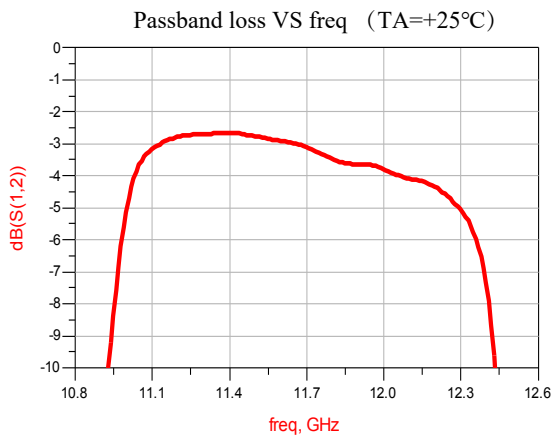
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11.525	-	GHz
Passband freq range	11.1	-	11.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.4GHz		-	dB
	≥40@12.75GHz		-	dB

Dimensions

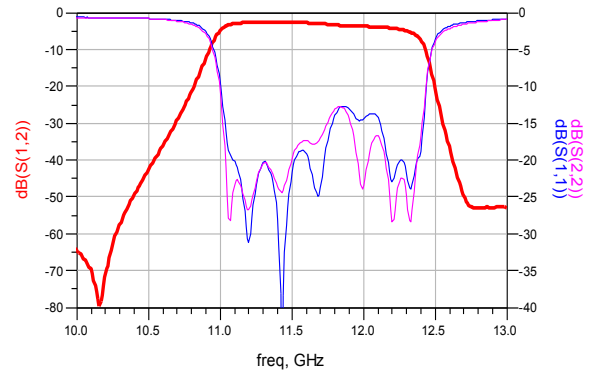


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	4.9	-	5

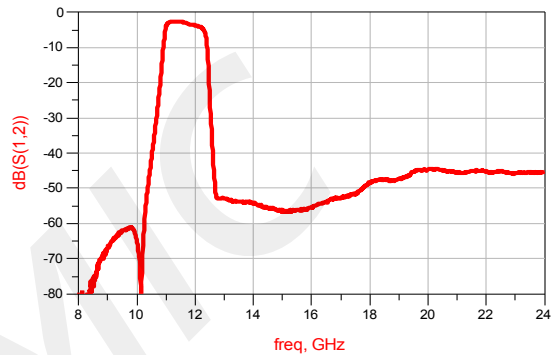
Typical test curve



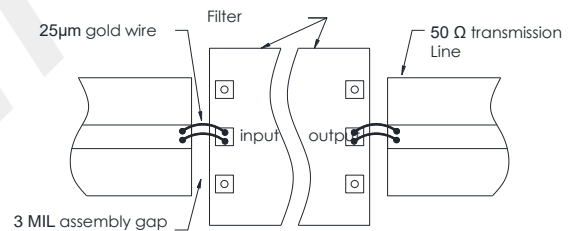
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

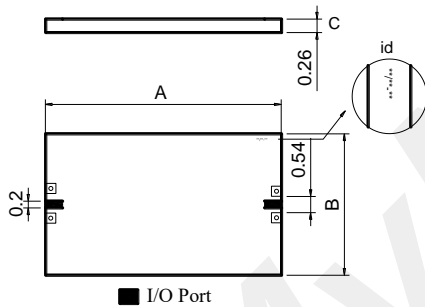
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

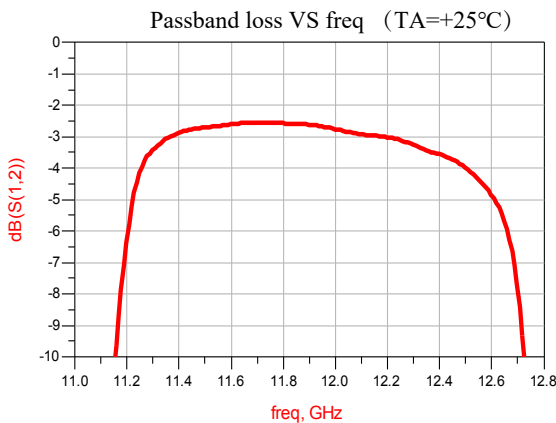
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	11.85	-	GHz
Passband freq range	11.3	-	12.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@10.7GHz			dB
	≥40@13.0GHz			dB

Dimensions

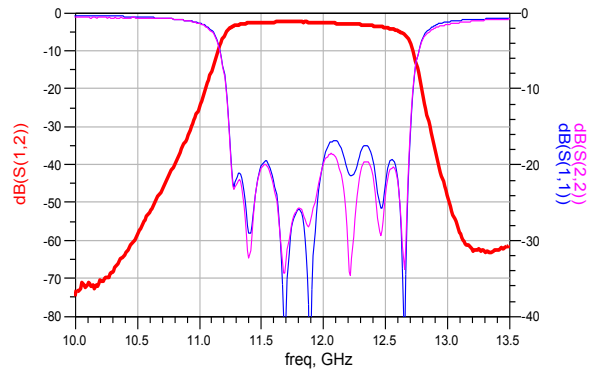


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	4.9	-	5

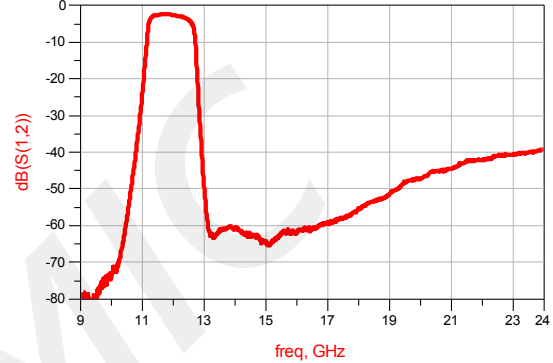
Typical test curve



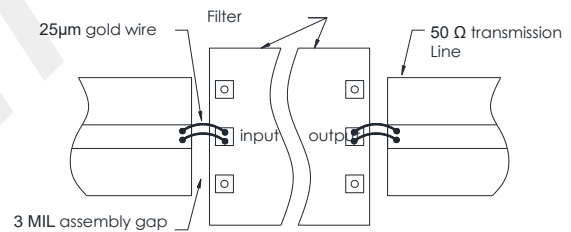
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

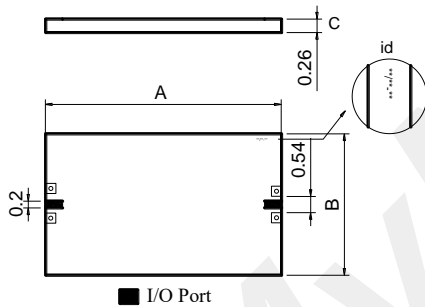
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

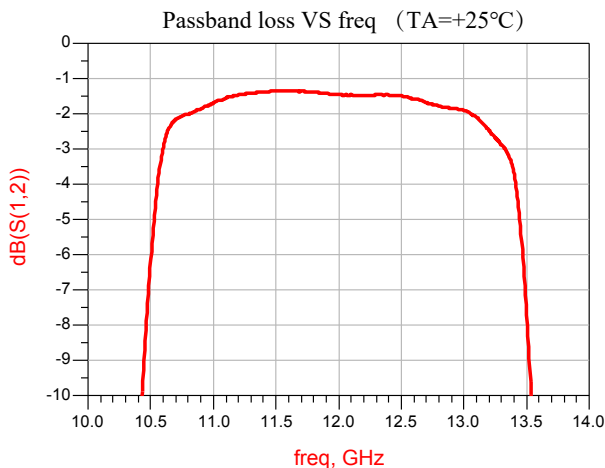
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12	-	GHz
Passband freq range	10.9	-	13.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@9.7GHz			dB
	≥40@14.3GHz			dB

Dimensions

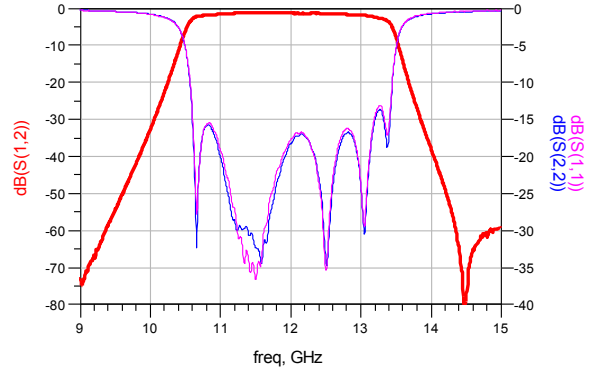


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.5	-	3.6

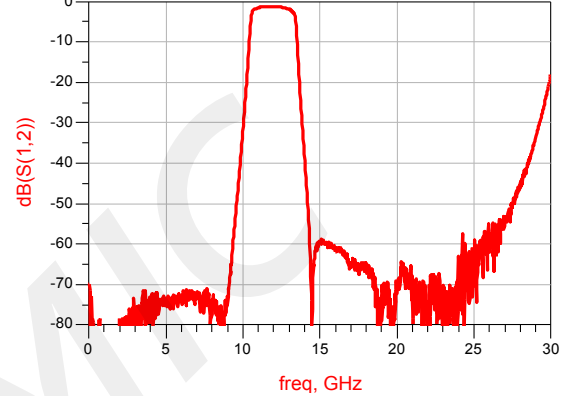
Typical test curve



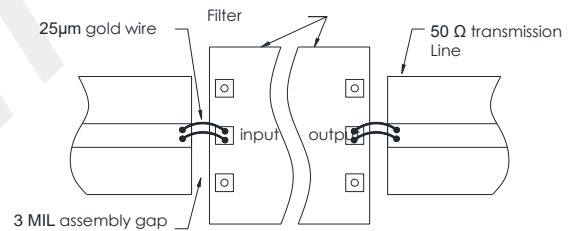
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

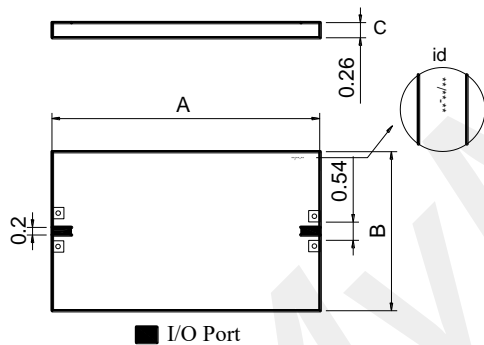
Environmental parameters

Operation temperature	-55℃~+85℃
Storage temperature	-55℃~+125℃
Max input Power	35dBm

Electrical Specification(T_A=+25℃)

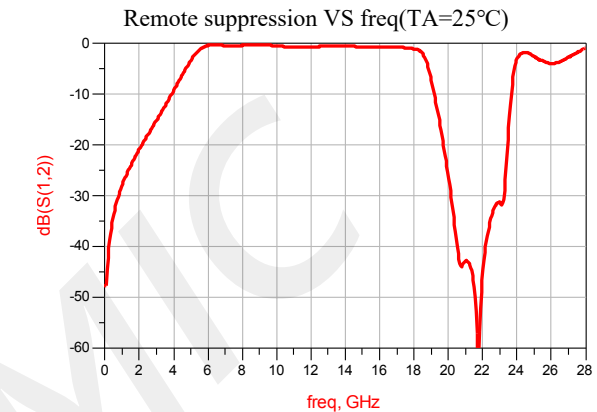
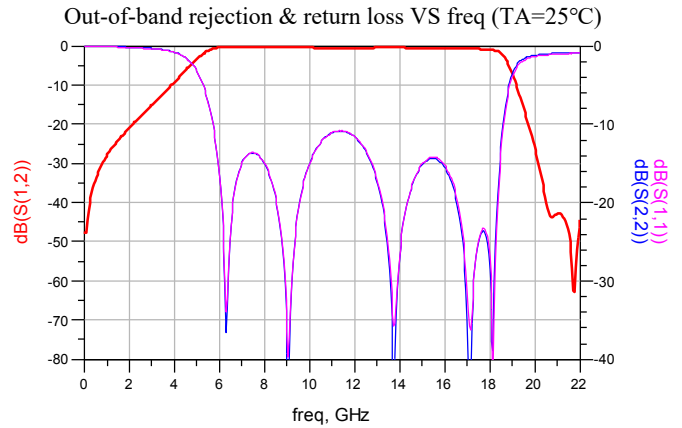
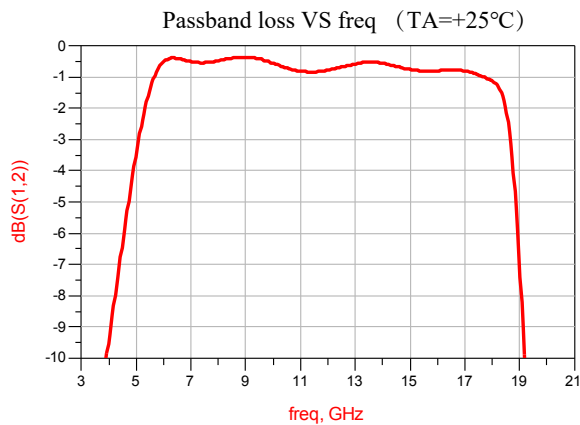
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.0	-	GHz
Passband freq range	6.0	-	18.0	GHz
In-band ripple	-	-	1.5	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥30@0.6GHz		-	dB
	≥30@20.3GHz		-	dB

Dimensions

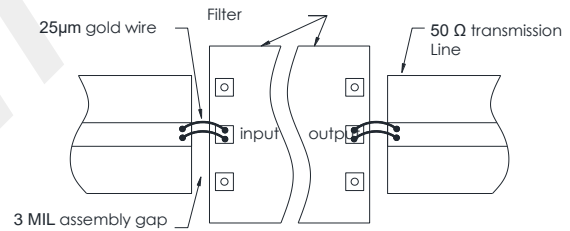


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6.0
B	3.8	-	3.9

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

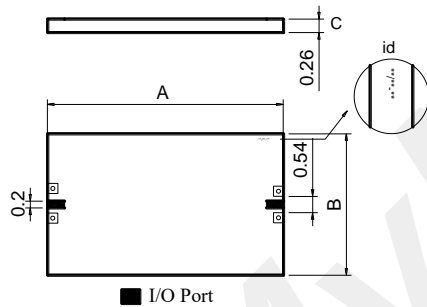
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

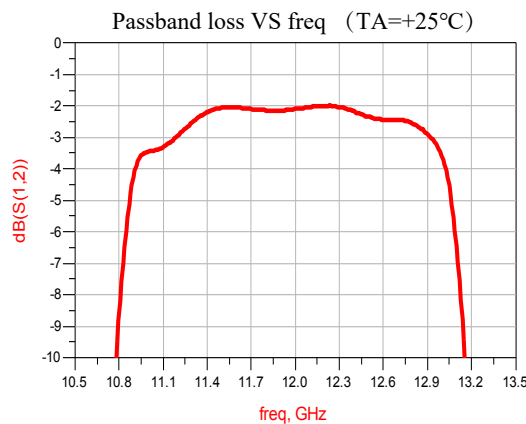
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.1	-	GHz
Passband freq range 1	1.3	-	12.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.0	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@10.1GHz			dB
	≥40@13.8GHz			dB

Dimensions

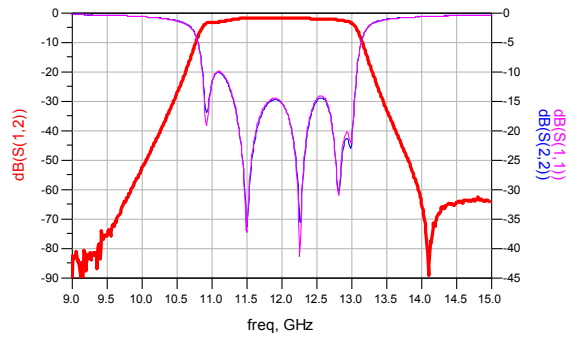


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.5	-	3.6

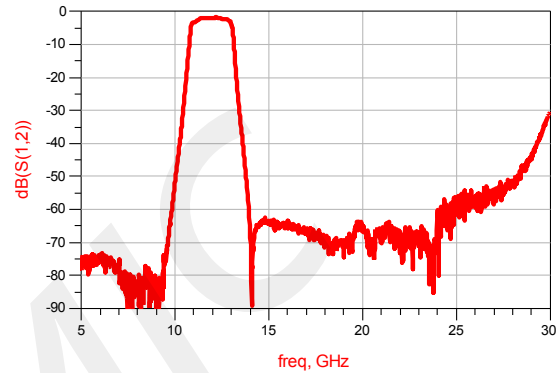
Typical test curve



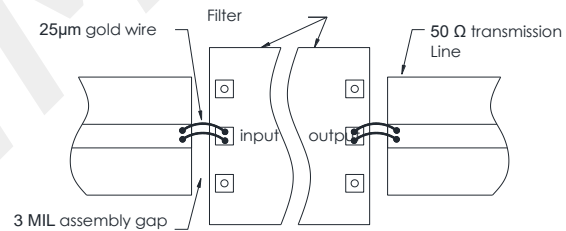
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

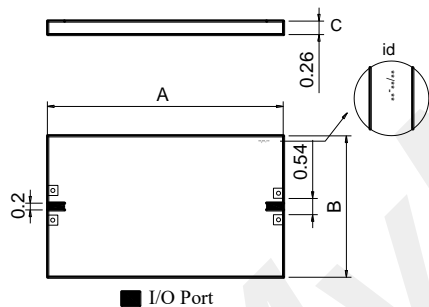
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

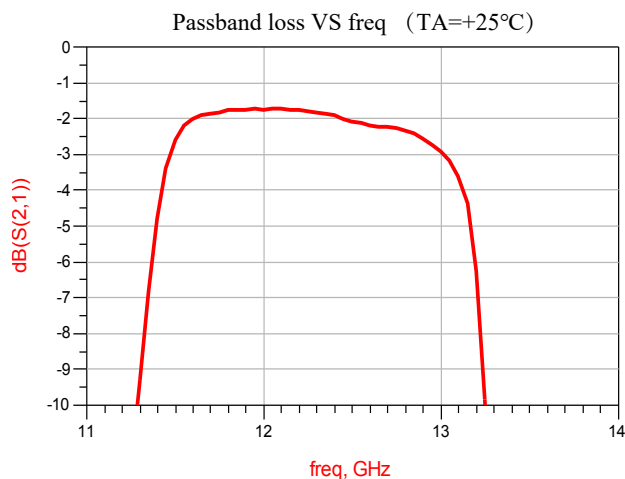
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.15	-	GHz
Passband freq range	11.6	-	12.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.35GHz		-	dB
	≥40@13.75GHz		-	dB

Dimensions

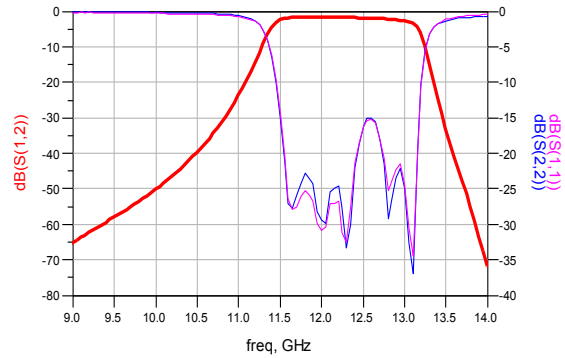


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.3	-	3.4

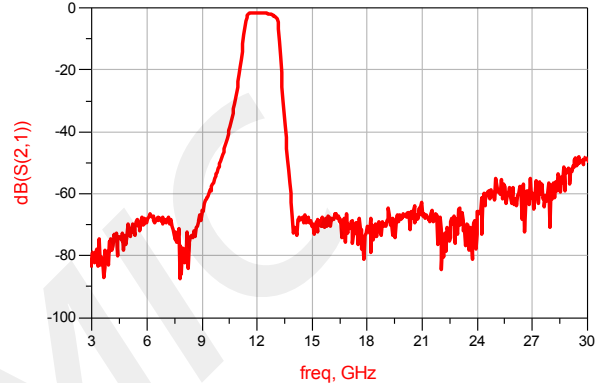
Typical test curve



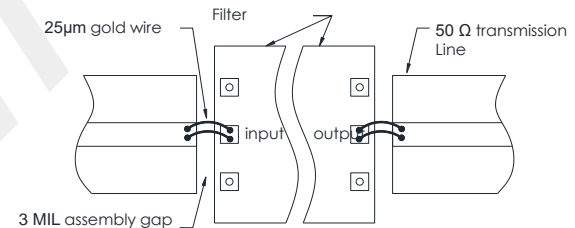
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

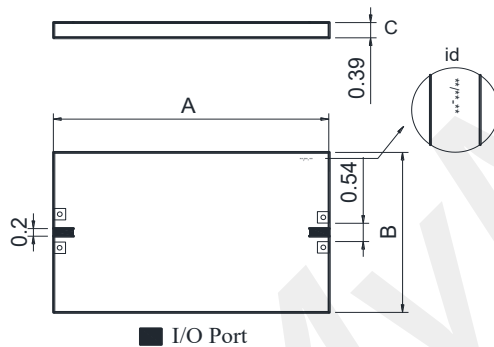
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

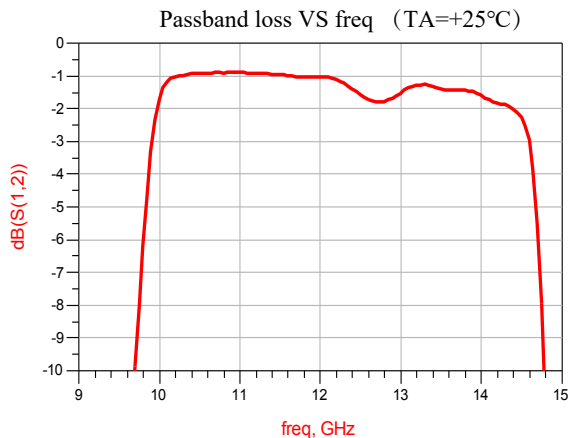
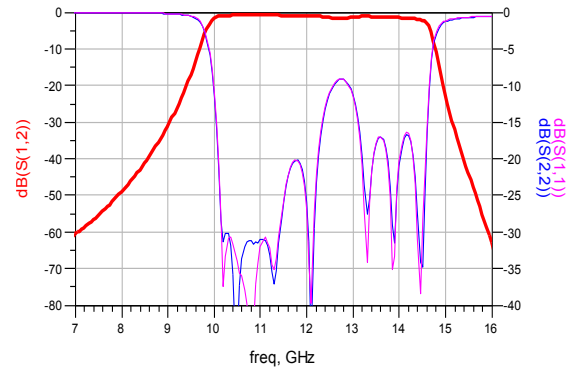
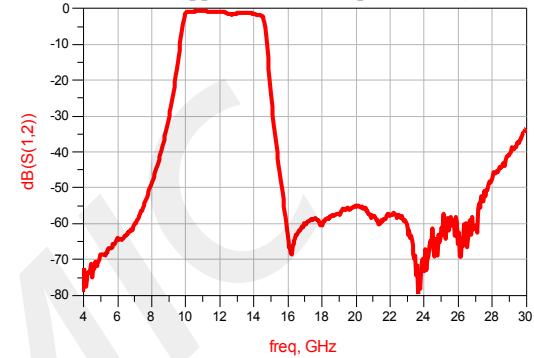
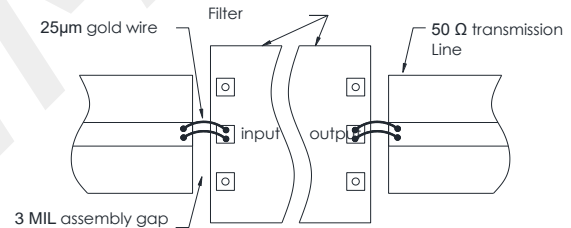
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.15	-	GHz
Passband freq range	10	-	14	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@8.2GHz		-	dB
	≥40@15.6GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

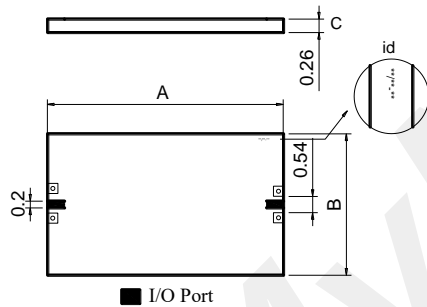
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

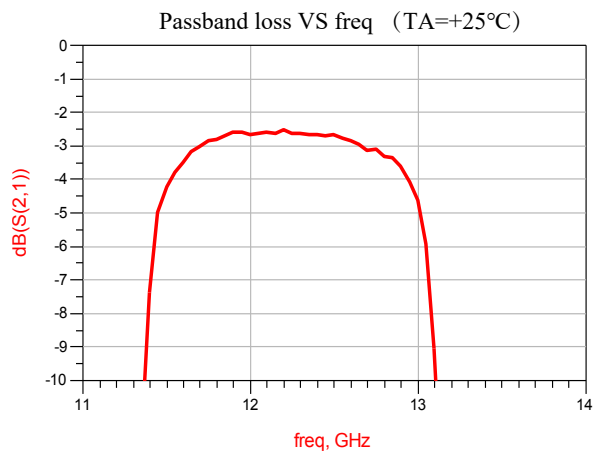
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.2	-	GHz
Passband freq range	11.7	-	12.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.9GHz			dB
	≥40@13.5GHz			dB

Dimensions

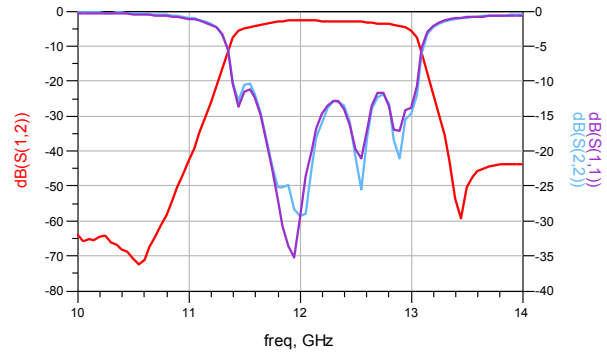


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.3	-	3.4

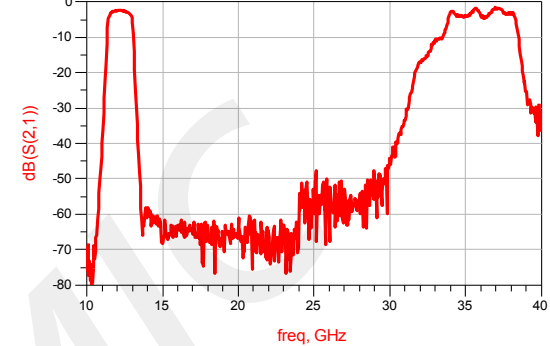
Typical test curve



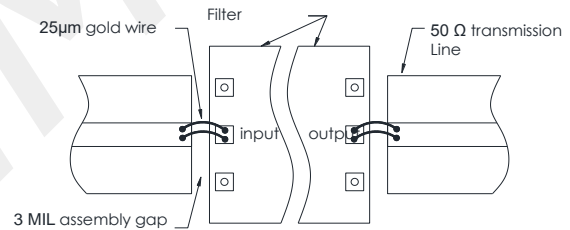
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

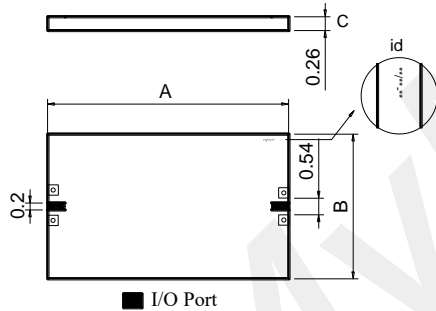
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

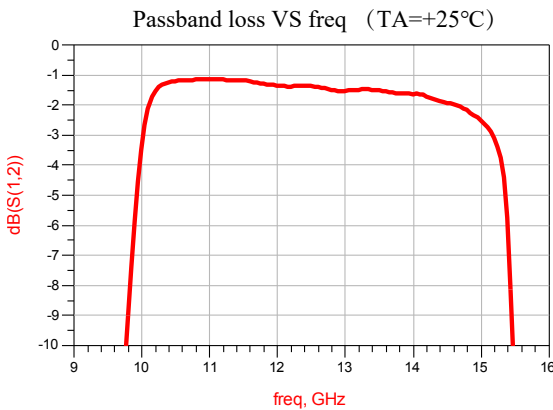
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.4	-	GHz
Passband freq range	10.2	-	14.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@8.0GHz		-	dB
	≥40@16.0GHz		-	dB

Dimensions

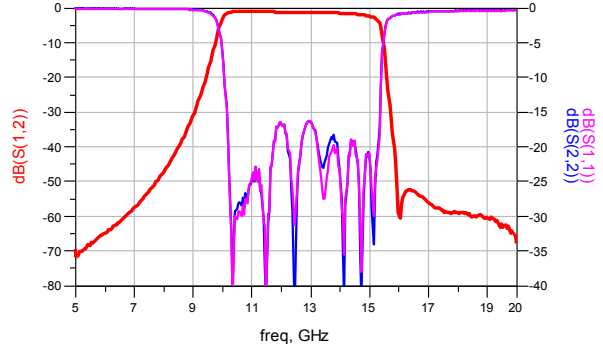


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.3	-	3.4

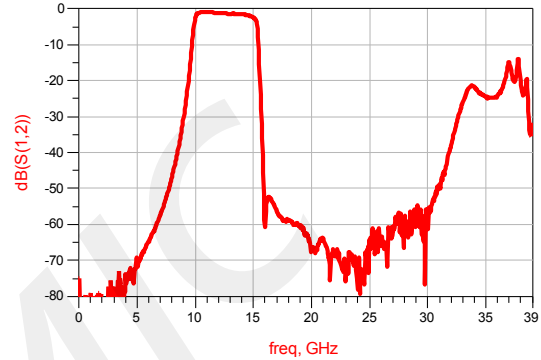
Typical test curve



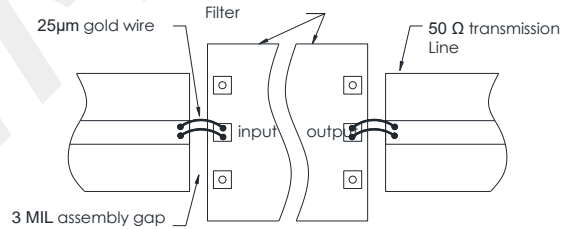
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

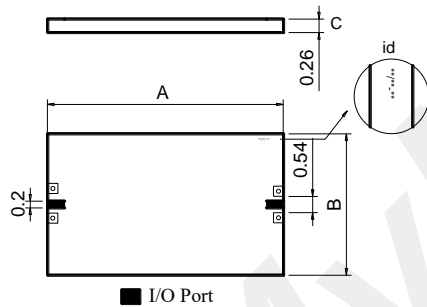
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

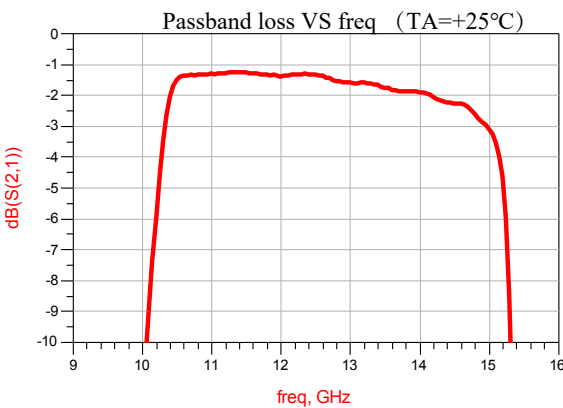
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.45	-	GHz
Passband freq range	10.4	-	14.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@8.6GHz		-	dB
	≥40@15.85GHz		-	dB

Dimensions

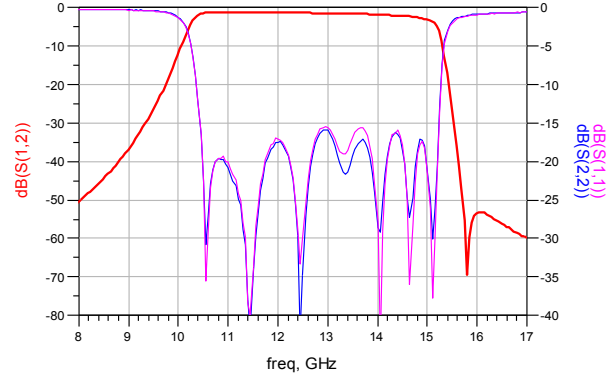


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.3	-	3.4

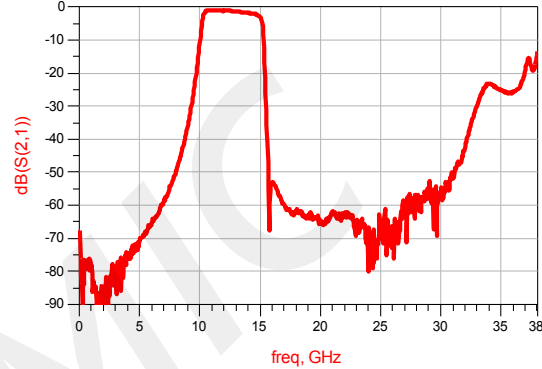
Typical test curve



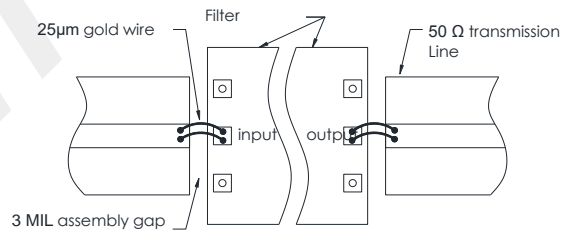
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

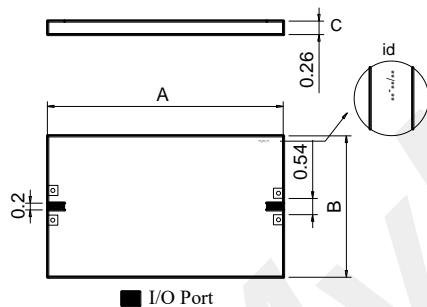
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

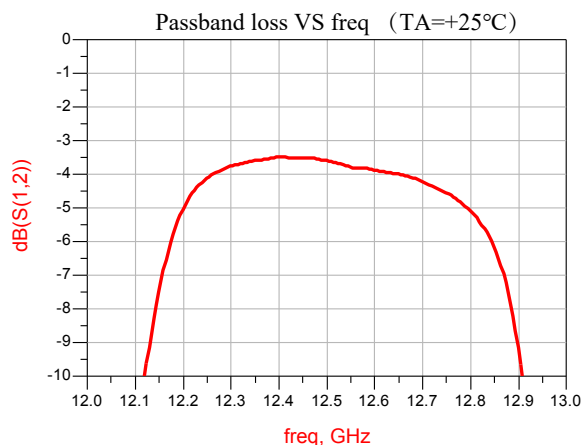
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.5	-	GHz
Passband freq range	12.3	-	12.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4.0	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@11.7GHz		-	dB
	≥40@13.2GHz		-	dB

Dimensions

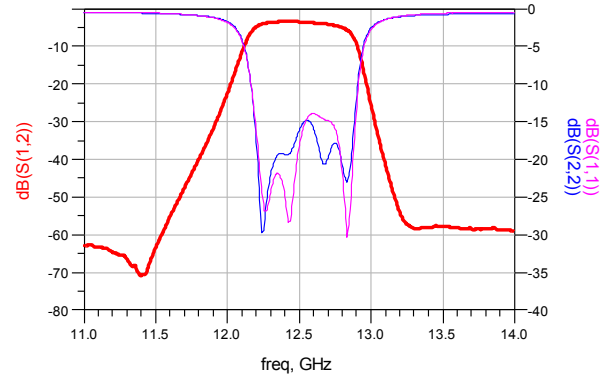


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	4.8	-	4.9

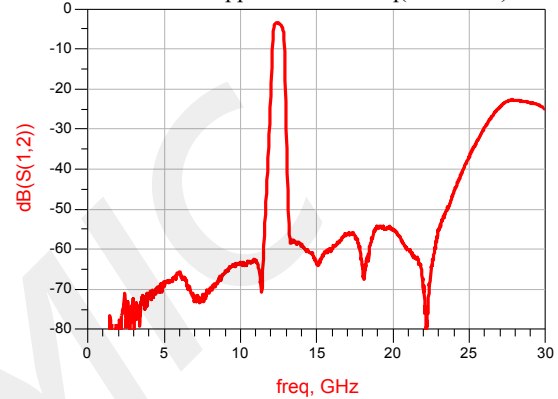
Typical test curve



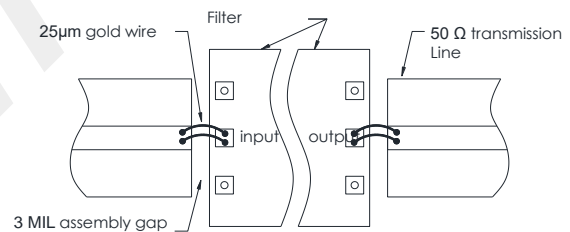
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

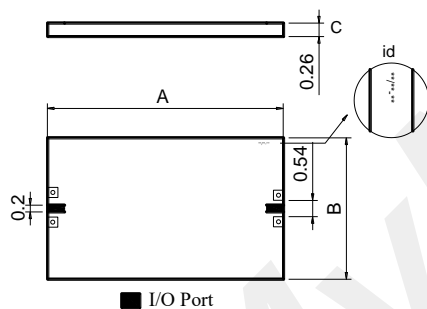
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

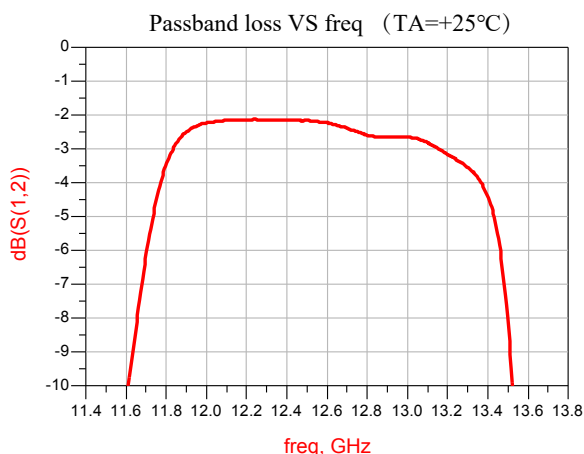
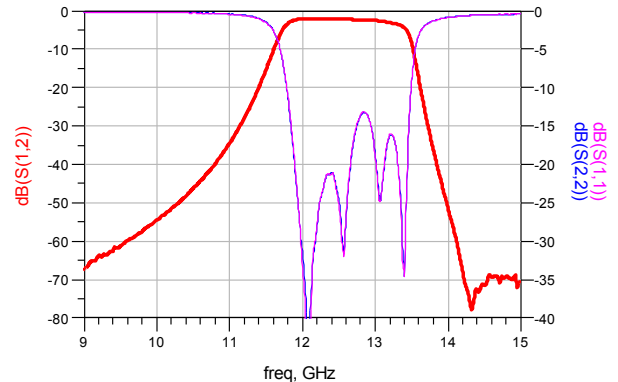
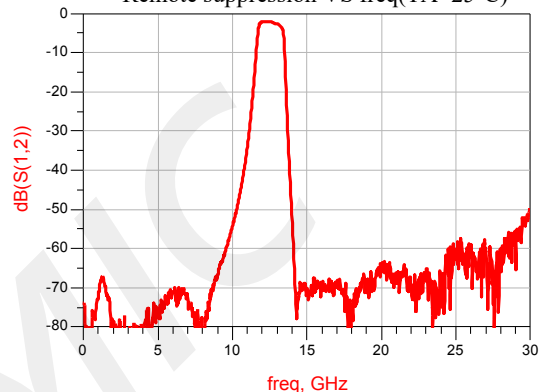
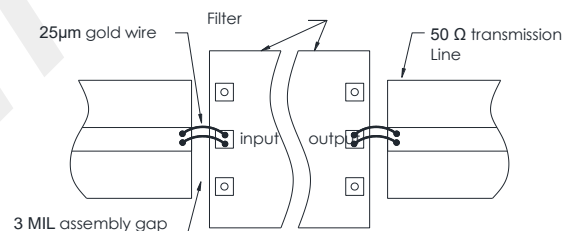
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.5	-	GHz
Passband freq range	11.9	-	13.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.6GHz		-	dB
	≥40@14.0GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

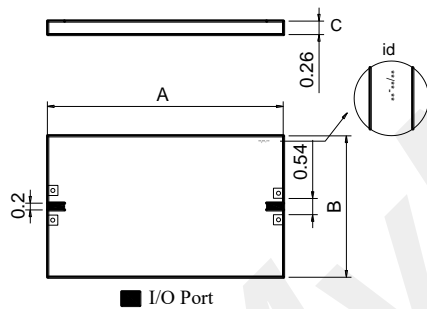
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

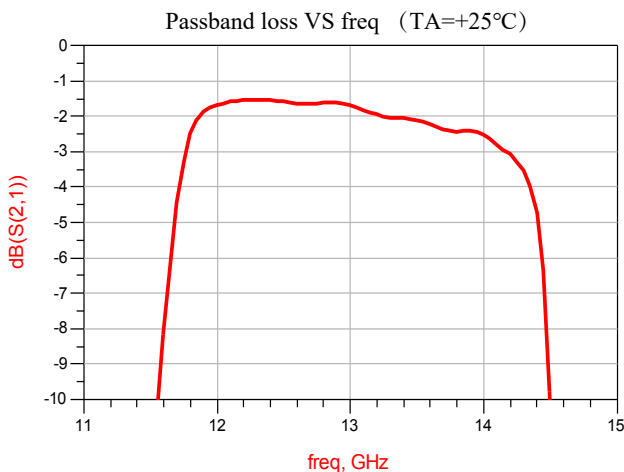
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.65	-	GHz
Passband freq range	11.8	-	13.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.3GHz		-	dB
	≥40@15.0GHz		-	dB

Dimensions

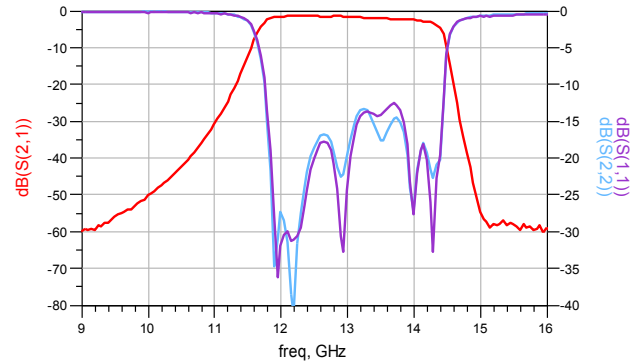


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.2	-	3.3

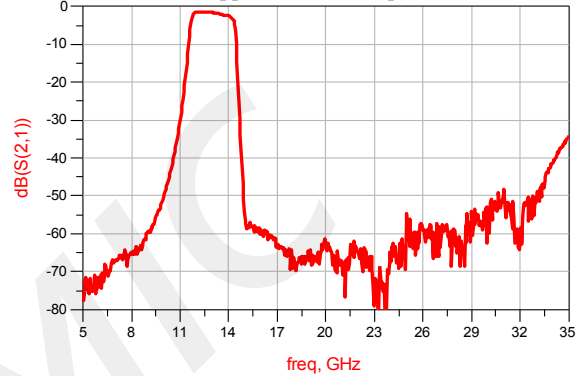
Typical test curve



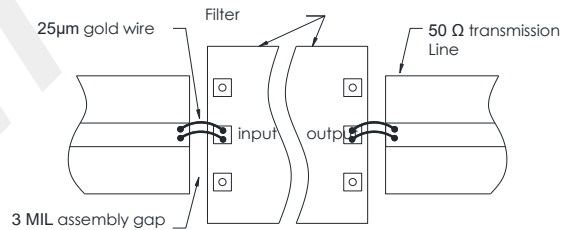
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

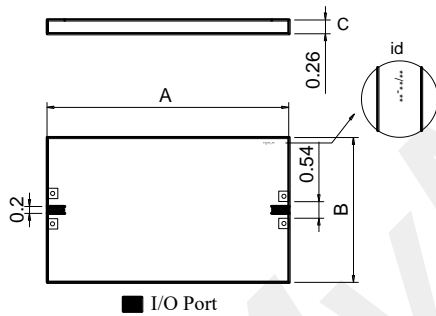
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

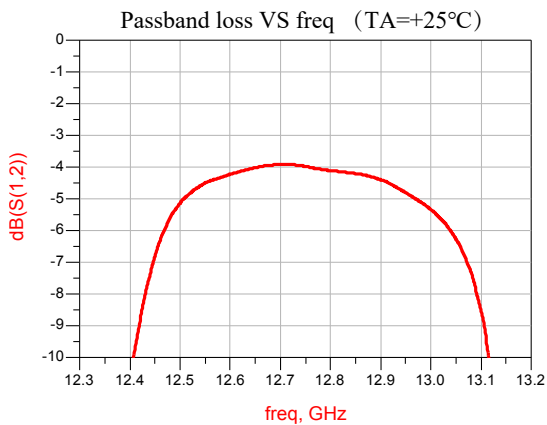
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	12.75	-	GHz
Passband freq range	12.6	-	12.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@11.95GHz		-	dB
	≥40@13.4GHz		-	dB

Dimensions

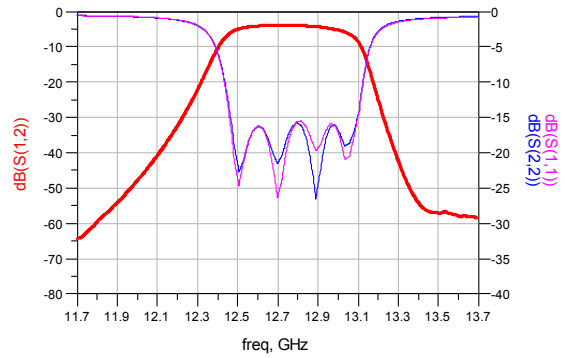


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	4.4	-	4.5

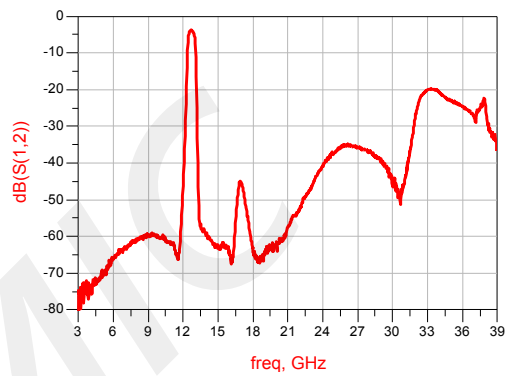
Typical test curve



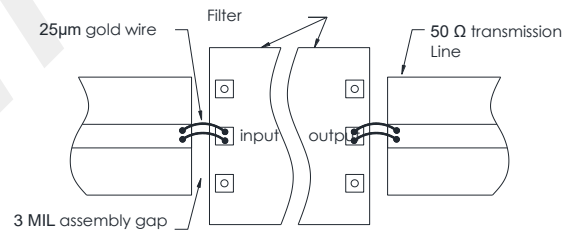
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

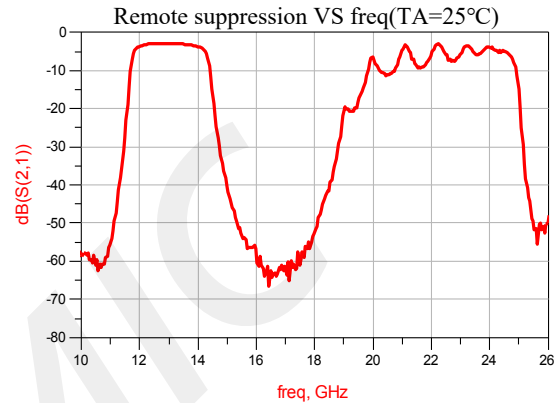
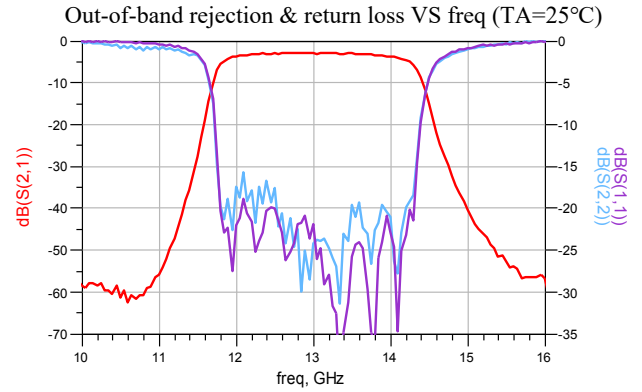
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

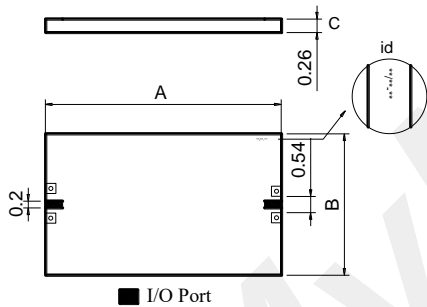
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13	-	GHz
Passband freq range	12.1	-	13.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	18.5	-	dB
Out-of-band atten	≥40@11.2GHz		-	dB
	≥40@15.2GHz		-	dB

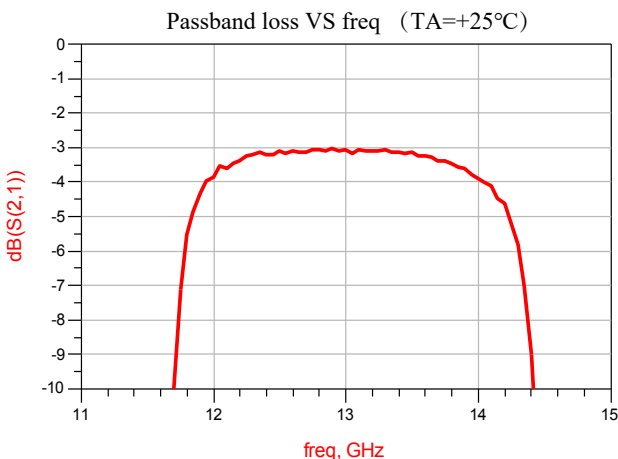


Dimensions

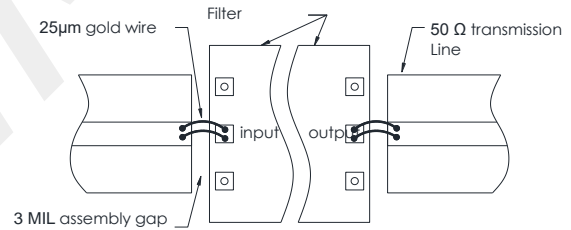


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

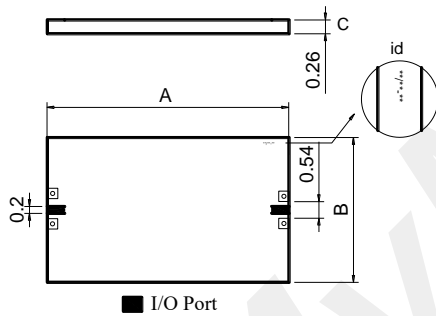
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

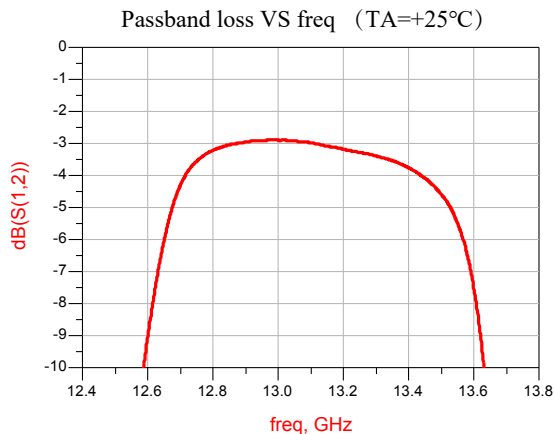
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.05	-	GHz
Passband freq range	12.75	-	13.35	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@12.0GHz		-	dB
	≥40@13.95GHz		-	dB

Dimensions

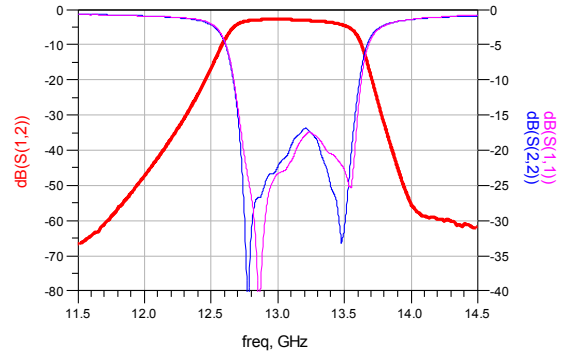


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	4.4	-	4.5

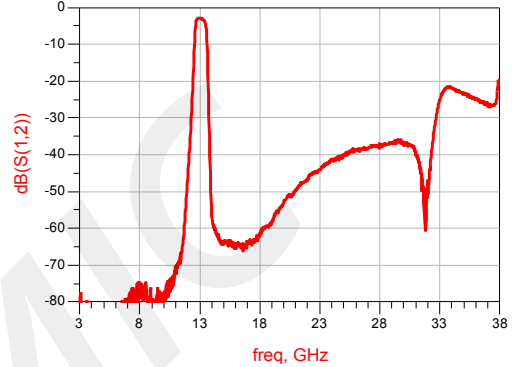
Typical test curve



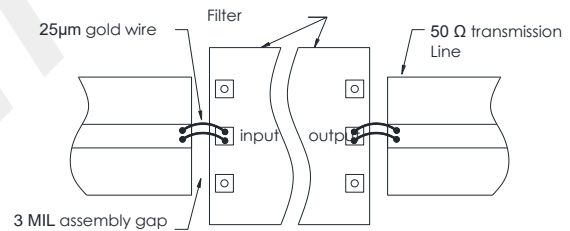
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

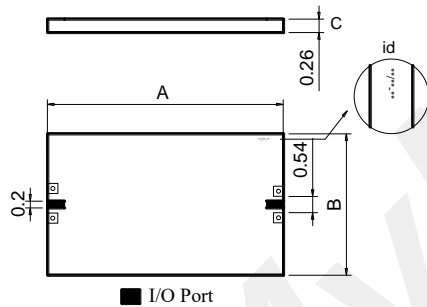
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

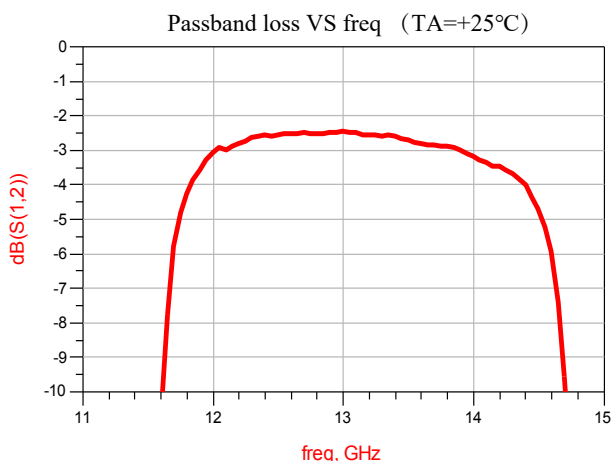
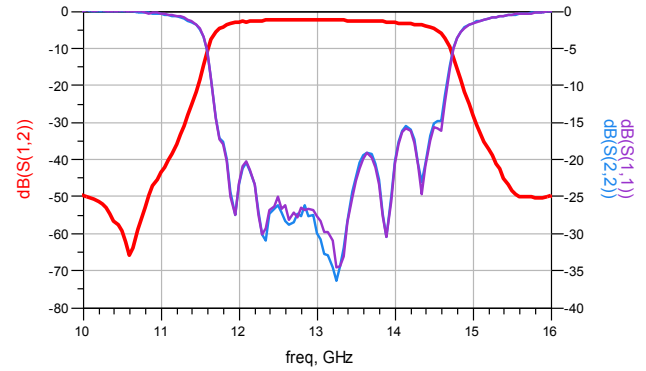
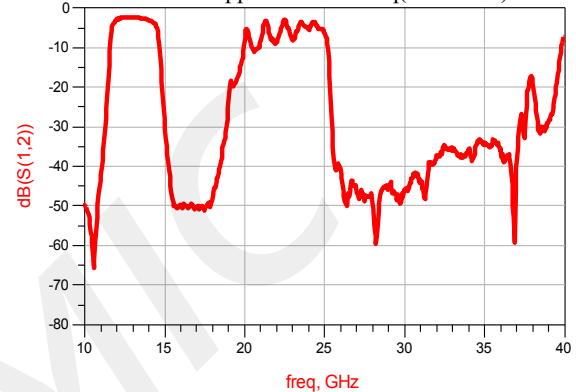
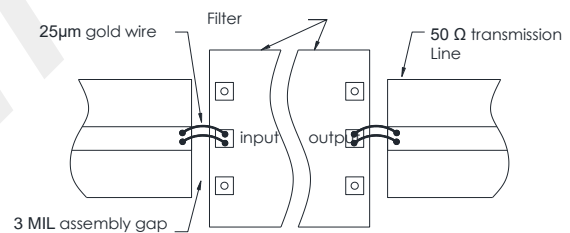
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.1	-	GHz
Passband freq range	12.2	-	14.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.8GHz			dB
	≥40@15.7GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

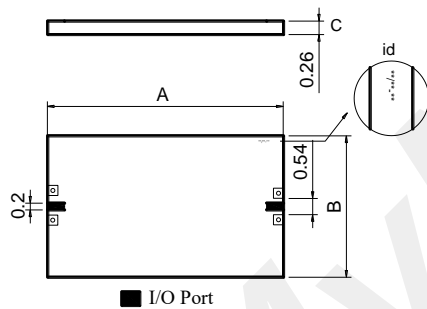
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

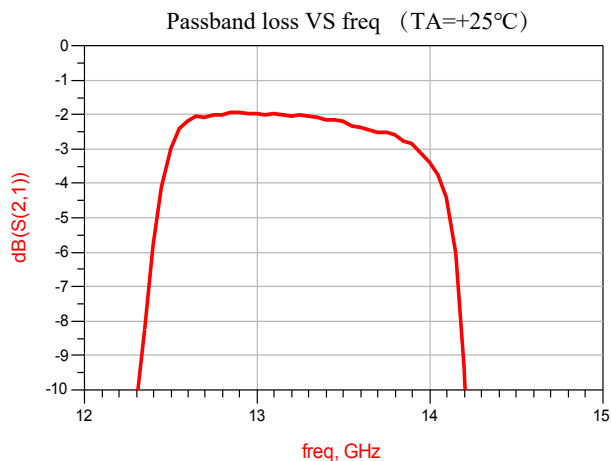
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

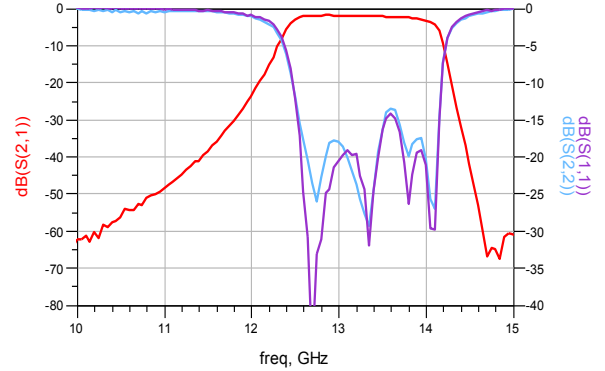
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.2	-	GHz
Passband freq range	12.7	-	13.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@11.2GHz			dB
	≥40@14.6GHz			dB

Dimensions


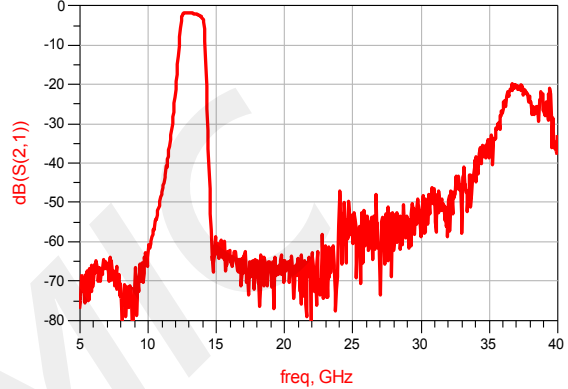
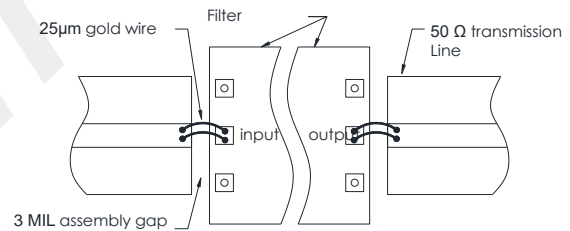
Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.1	-	3.2

Typical test curve


Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)


Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

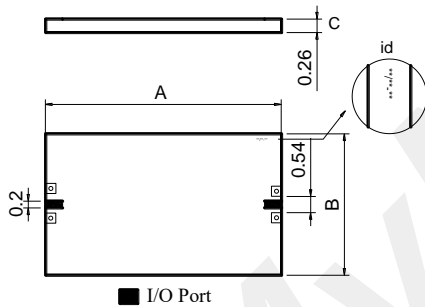
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

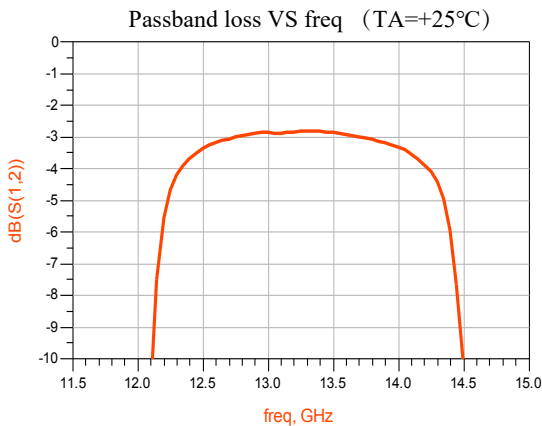
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.25	-	GHz
Passband freq range	12.4	-	14.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@11.6GHz		-	dB
	≥40@15.3GHz		-	dB

Dimensions

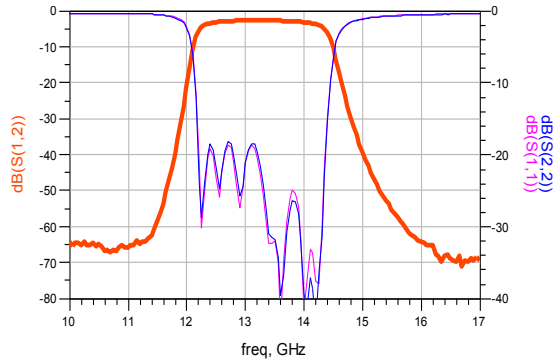


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

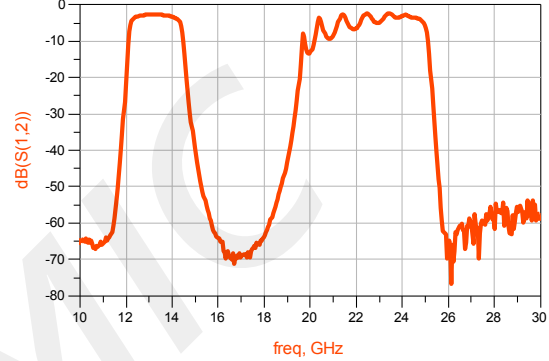
Typical test curve



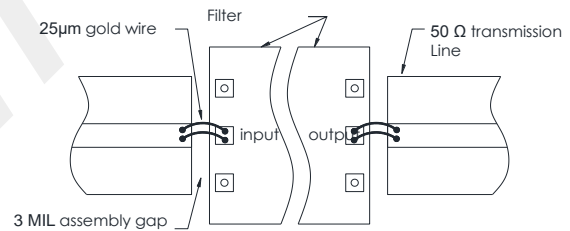
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

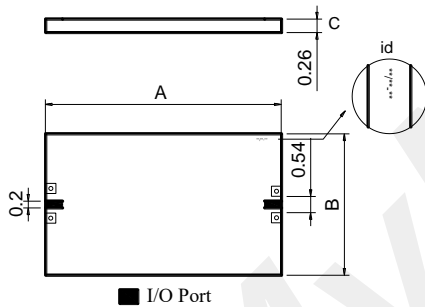
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

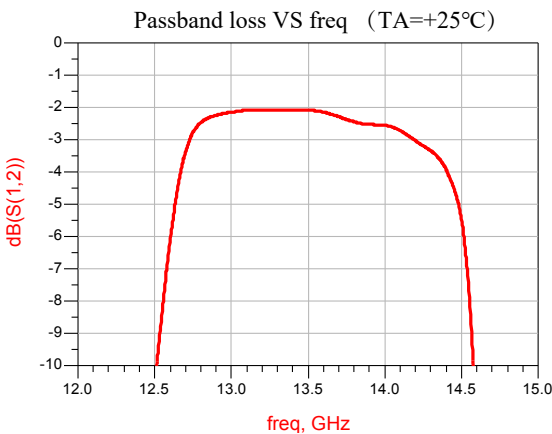
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.4	-	GHz
Passband freq range	12.9	-	14.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@11.2GHz			dB
	≥40@15.0GHz			dB

Dimensions

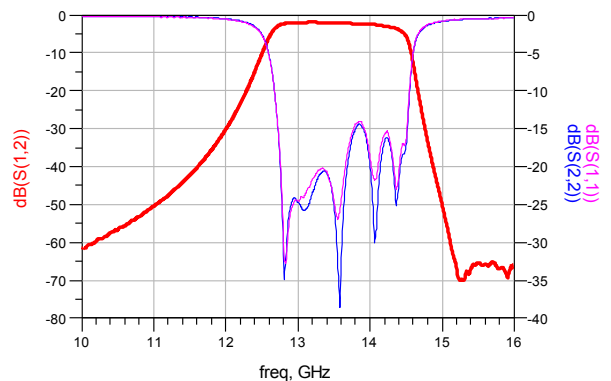


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.4	-	3.5

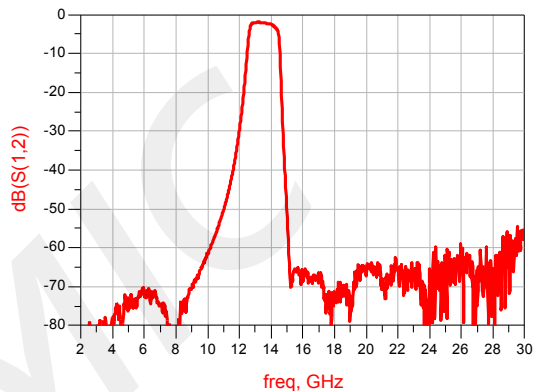
Typical test curve



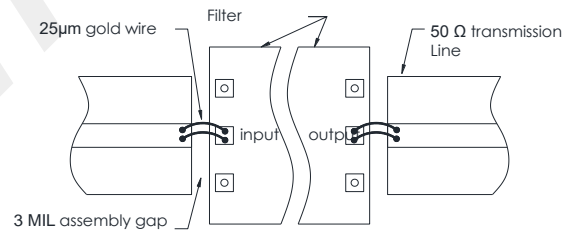
Out-of-band rejection & return loss VS freq (TA=25°C)



远端抑制 VS 频率(T_A=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

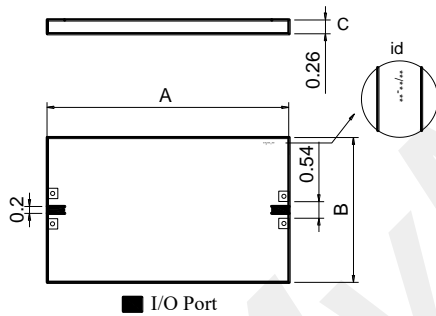
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

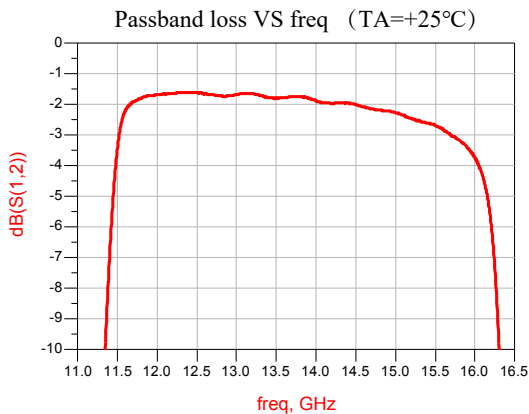
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.4	-	GHz
Passband freq range	11.6	-	15.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@10.5GHz		-	dB
	≥40@16.85GHz		-	dB

Dimensions

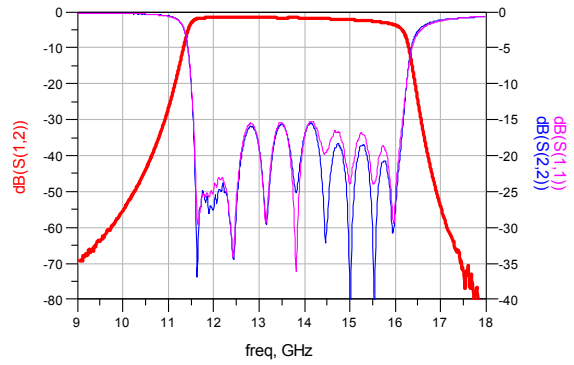


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	3.1	-	3.2

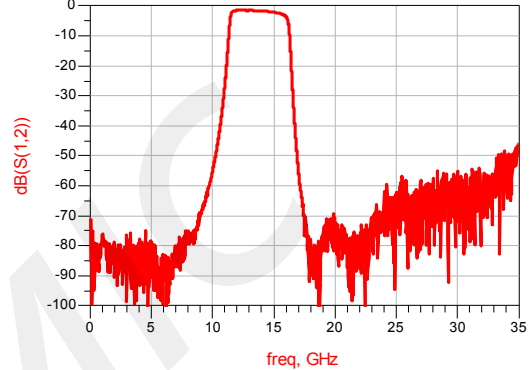
Typical test curve



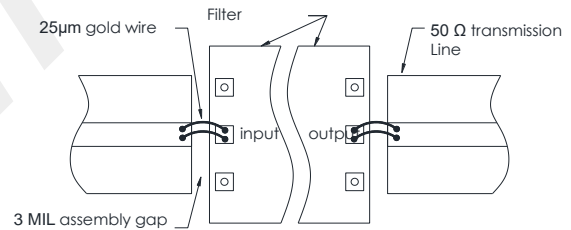
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications .

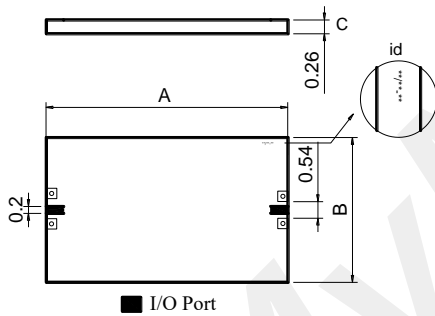
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

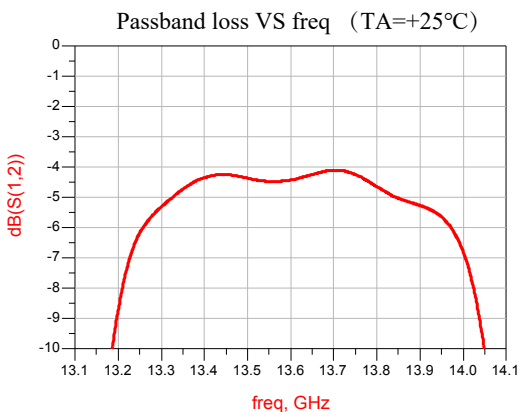
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.6	-	GHz
Passband freq range	13.4	-	13.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	5.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@12.85GHz		-	dB
	≥40@14.35GHz		-	dB

Dimensions

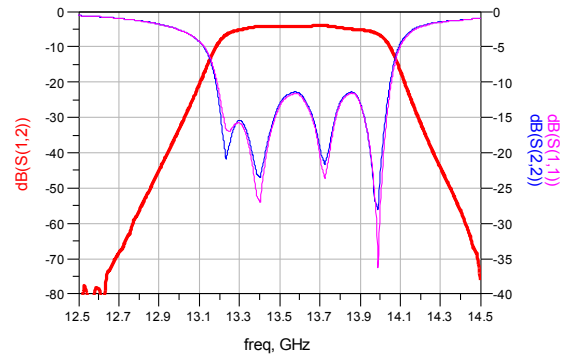


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	2.9	-	3.0

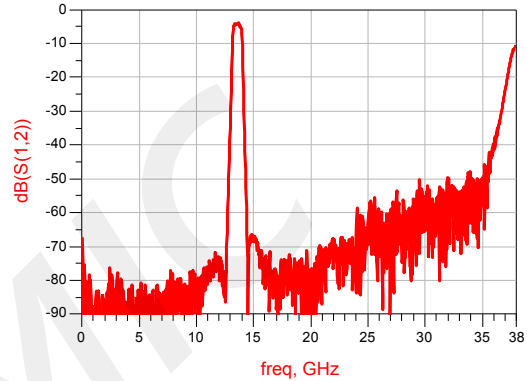
Typical test curve



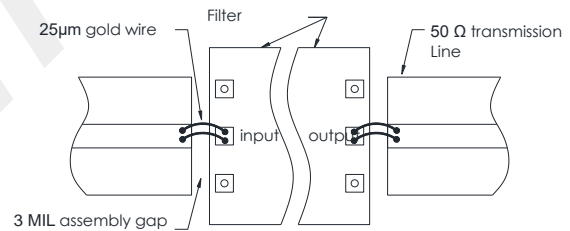
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

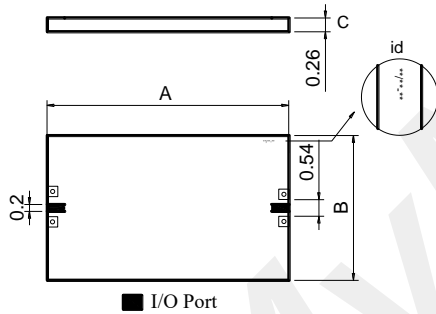
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

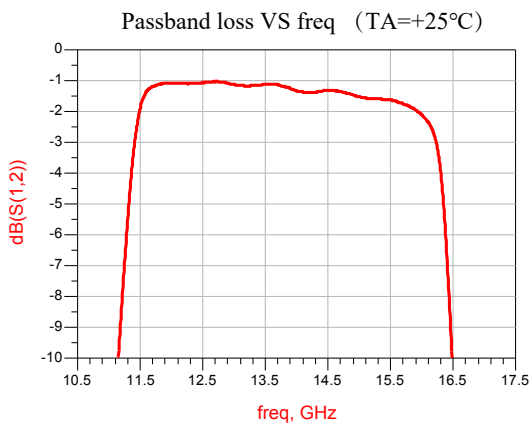
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	13.7	-	GHz
Passband freq range	11.75	-	15.75	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@9.3GHz		-	dB
	≥40@17.6GHz		-	dB

Dimensions

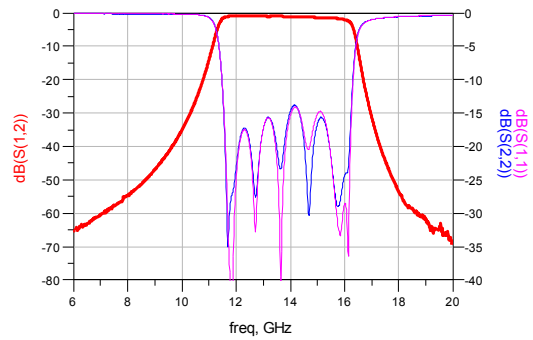


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6.0
B	2.9	-	3.0

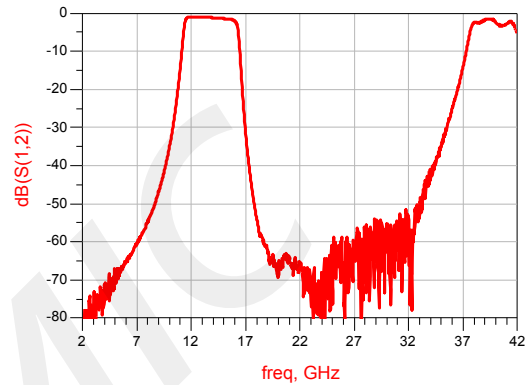
Typical test curve



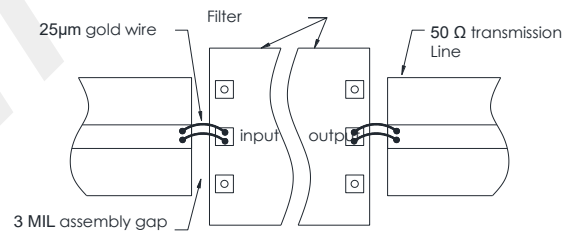
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

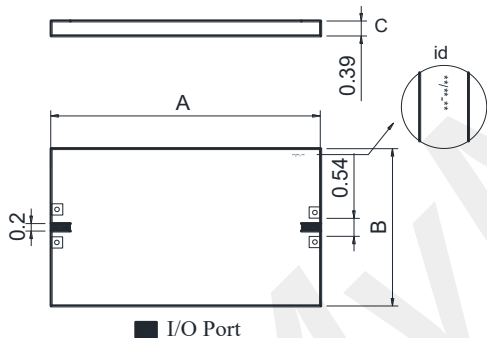
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

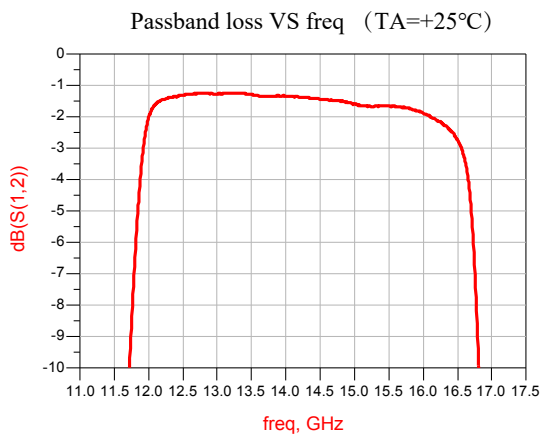
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	14.0	-	GHz
Passband freq range	12.0	-	16.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@10.6GHz		-	dB
	≥40@17.6GHz		-	dB

Dimensions

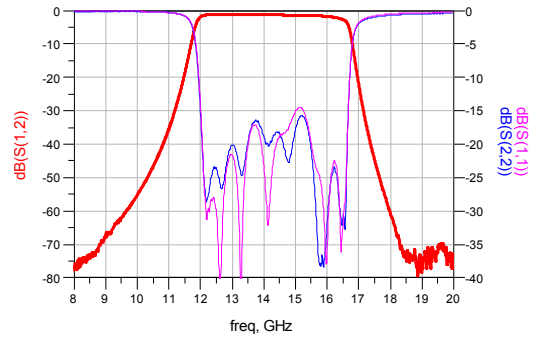


Size symbol	Value(mm)		
	Min	Nominal	Max
A	9.4	-	9.5
B	2.9	-	3.0

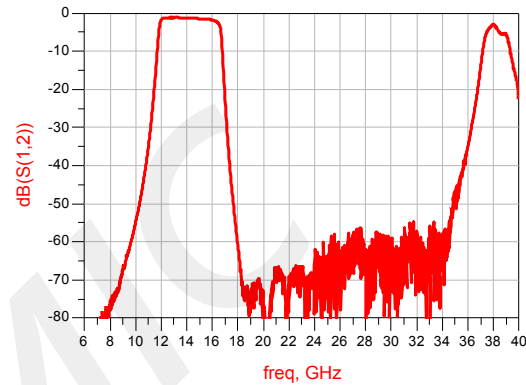
Typical test curve



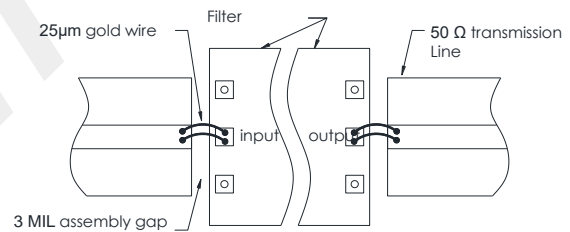
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

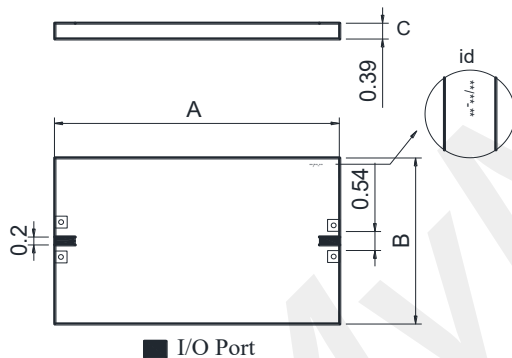
Environmental parameters

Operation temperature	-55°C ~ +85°C
Storage temperature	-55°C ~ +125°C
Max input Power	35dBm

Electrical Specification (T_A = +25°C)

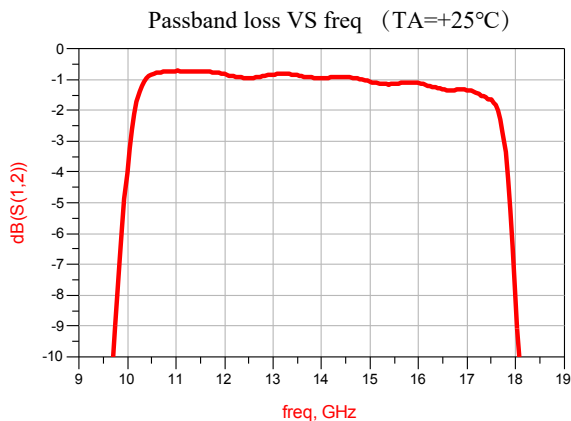
Items	Min	Typ	Max	Unit
Center Freq (f ₀)	-	14	-	GHz
Passband freq range	10.3	-	17.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@7.45GHz			dB
	≥40@19.9GHz			dB

Dimensions

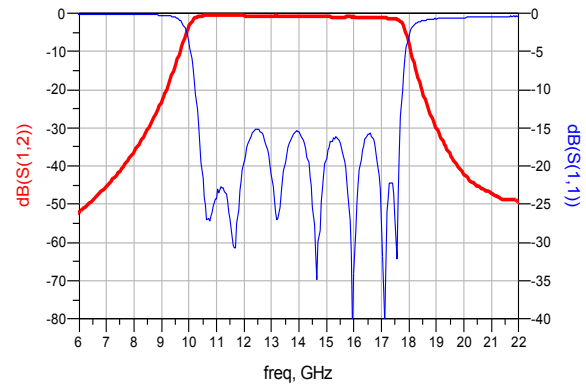


Size symbol	Value (mm)		
	Min	Nominal	Max
A	5.9	-	6
B	3.9	-	4

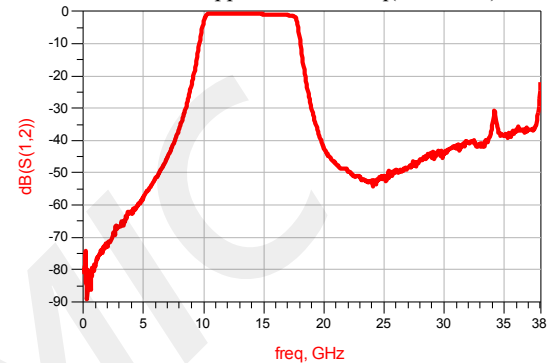
Typical test curve



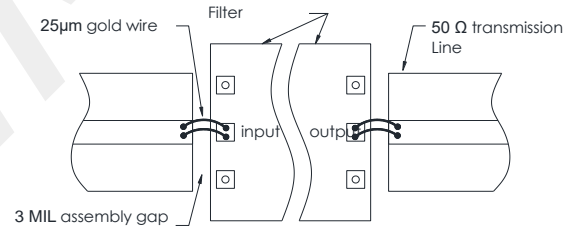
Out-of-band rejection & return loss VS freq (TA = 25°C)



Remote suppression VS freq (TA = 25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

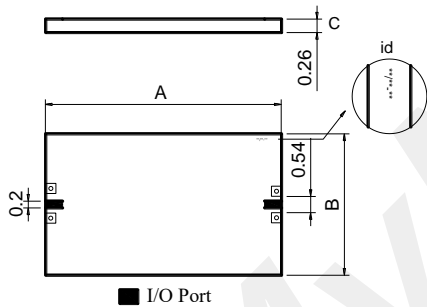
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

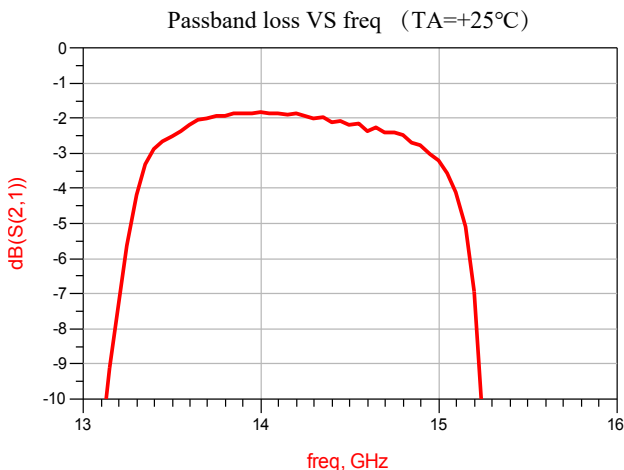
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.25	-	GHz
Passband freq range	13.7	-	14.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@12.2GHz		-	dB
	≥40@15.6GHz		-	dB

Dimensions

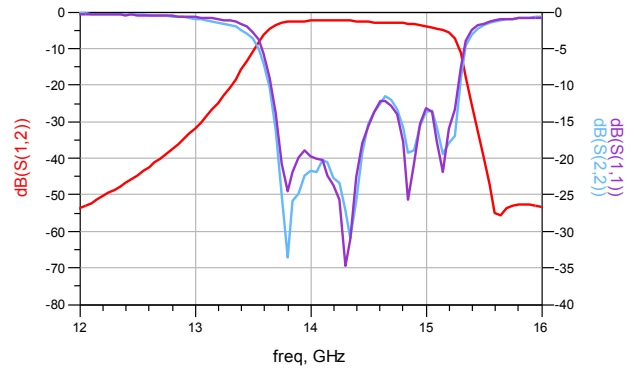


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.1	-	3.2

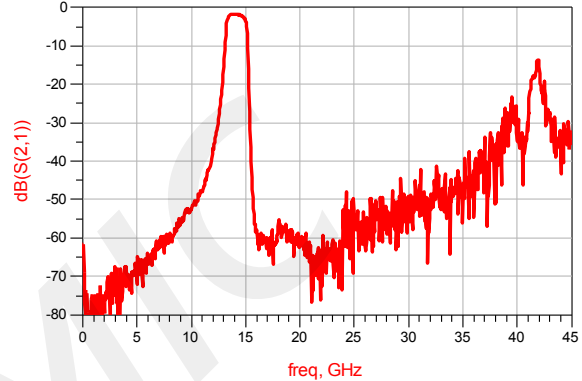
Typical test curve



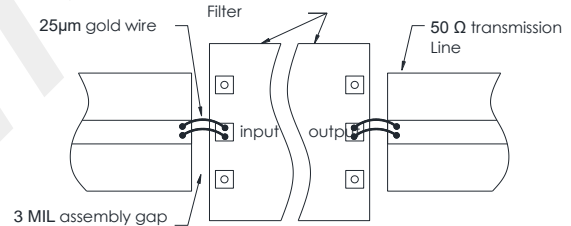
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

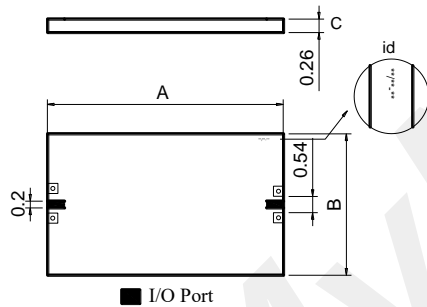
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

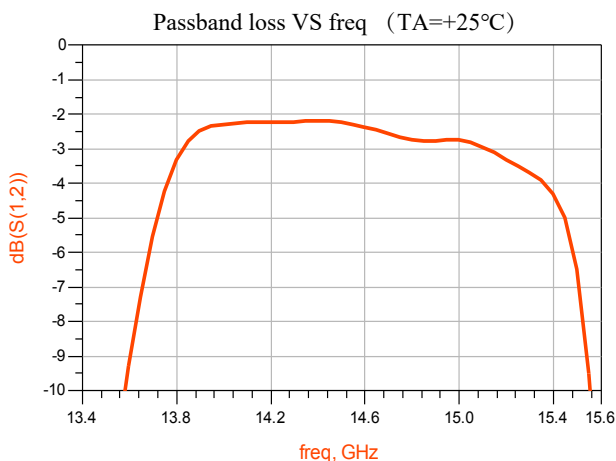
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.3	-	GHz
Passband freq range	13.9	-	15.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@12.5GHz			dB
	≥40@15.95GHz			dB

Dimensions

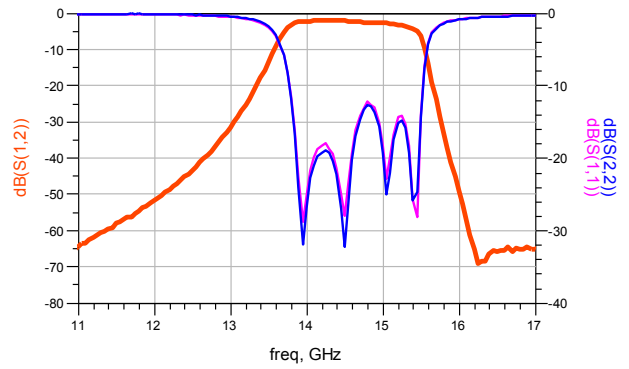


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.2	-	3.3

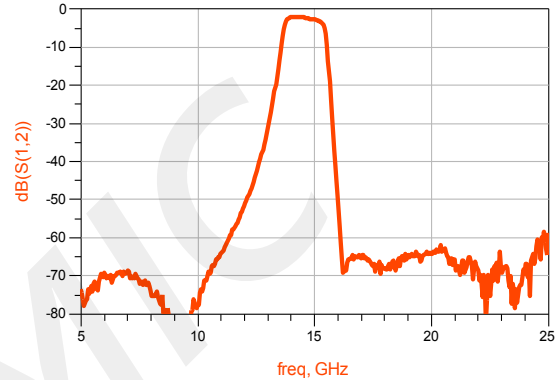
Typical test curve



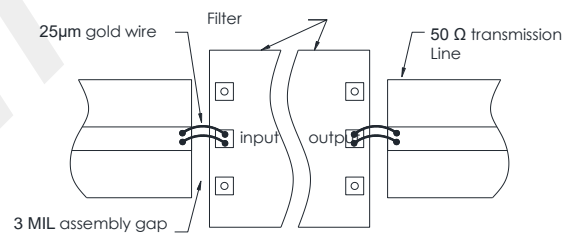
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

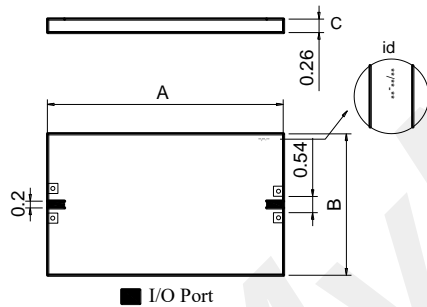
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

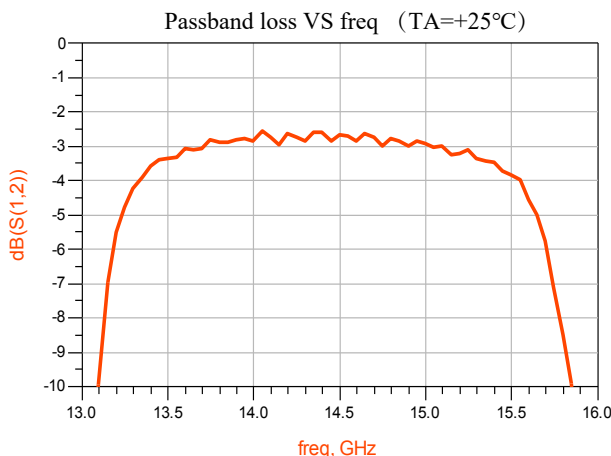
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.4	-	GHz
Passband freq range	13.45	-	15.35	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@12.5GHz			dB
	≥40@17.2GHz			dB

Dimensions

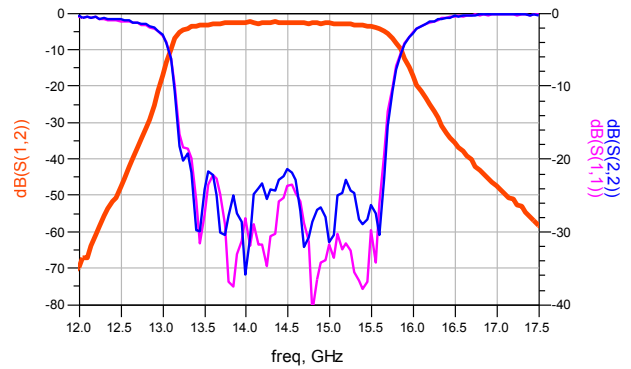


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	3.3	-	3.4

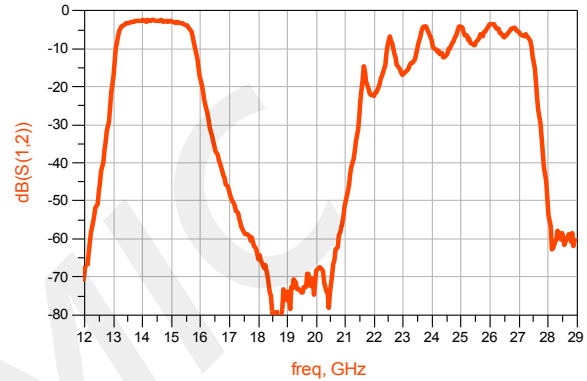
Typical test curve



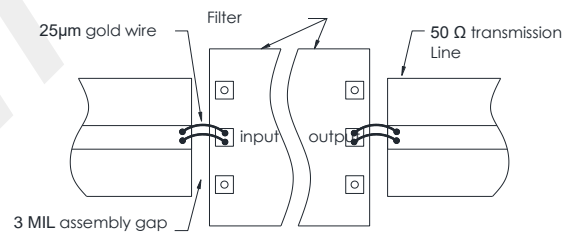
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

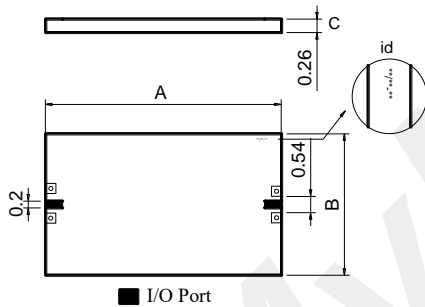
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

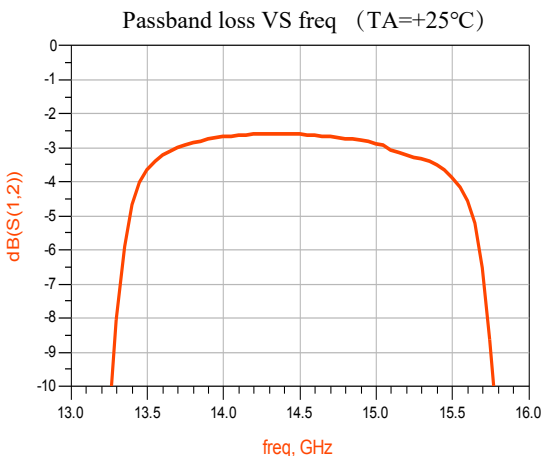
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.45	-	GHz
Passband freq range	13.6	-	15.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@12.7GHz			dB
	≥40@16.5GHz			dB

Dimensions

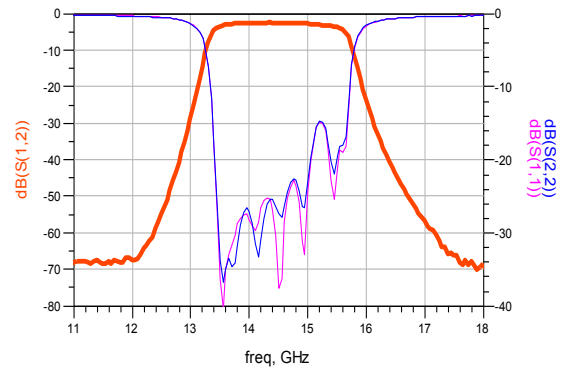


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	3.3	-	3.4

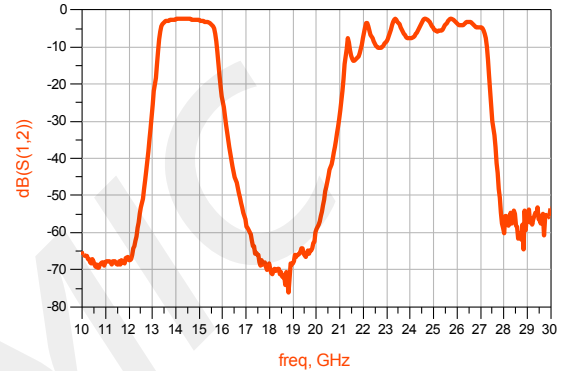
Typical test curve



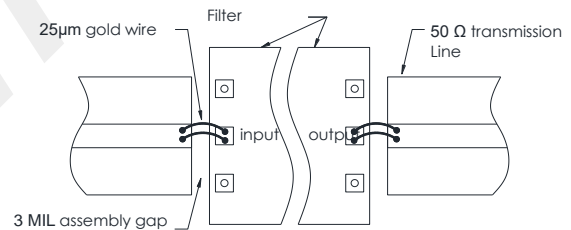
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications .

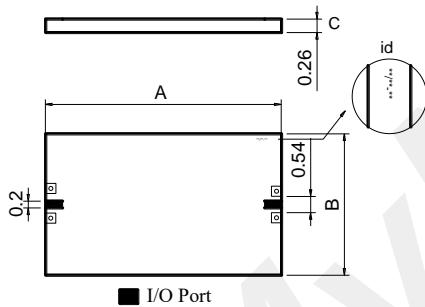
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

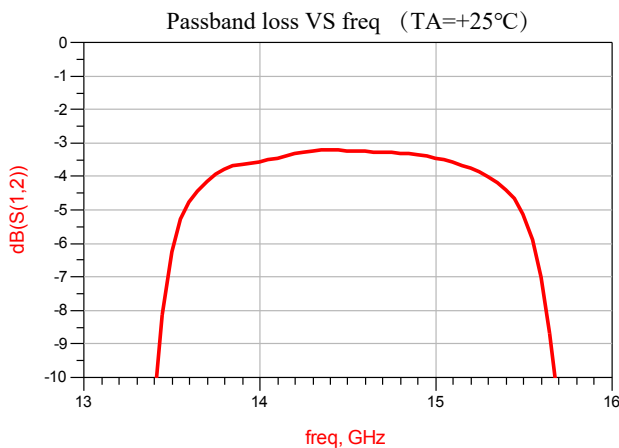
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.5	-	GHz
Passband freq range	13.75	-	15.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss		4	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@12.8GHz			dB
	≥40@16.6GHz			dB

Dimensions

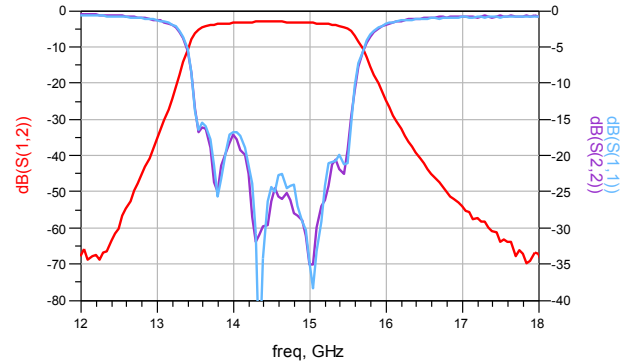


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	3.2	-	3.3

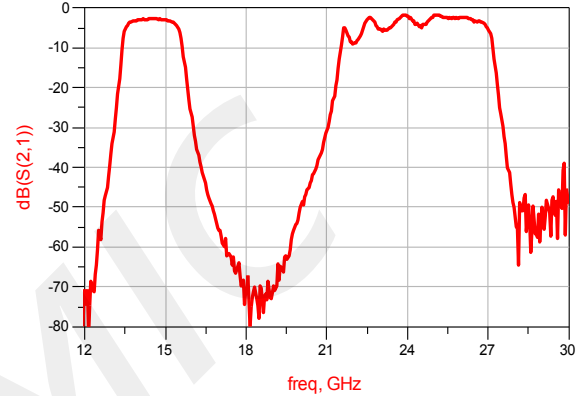
Typical test curve



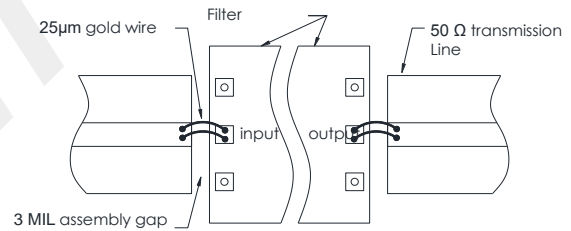
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications ·

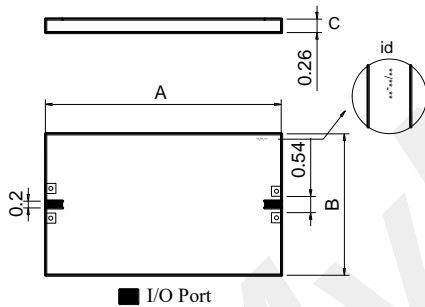
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

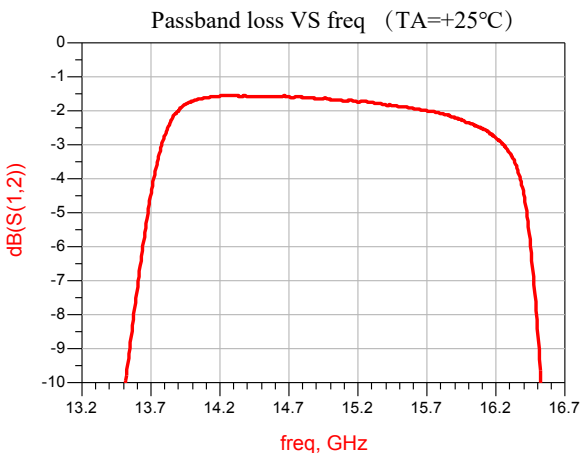
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	14.85	-	GHz
Passband freq range	13.9	-	16	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@11.6GHz			dB
	≥40@17.2GHz			dB

Dimensions

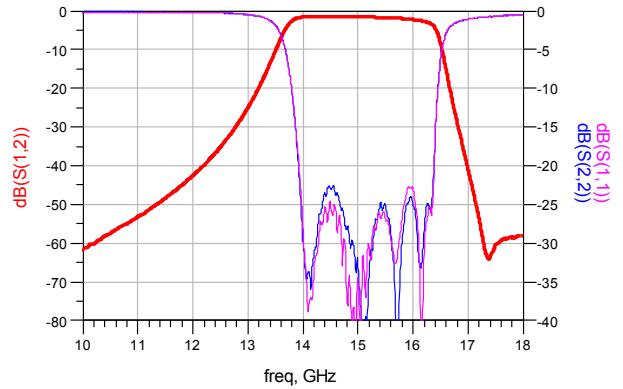


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.1	-	3.2

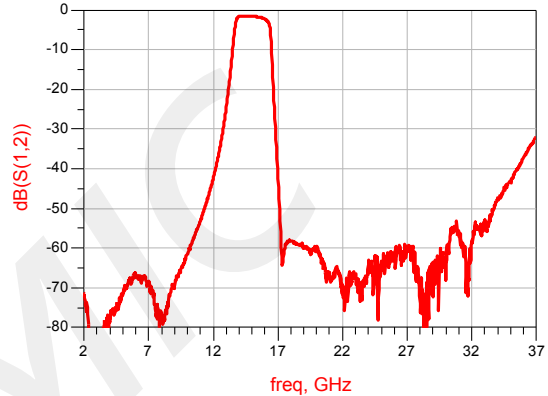
Typical test curve



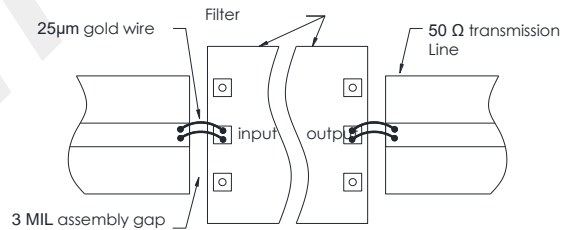
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

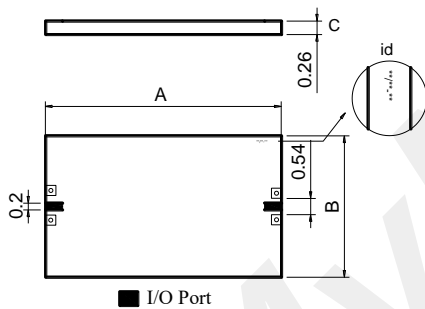
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

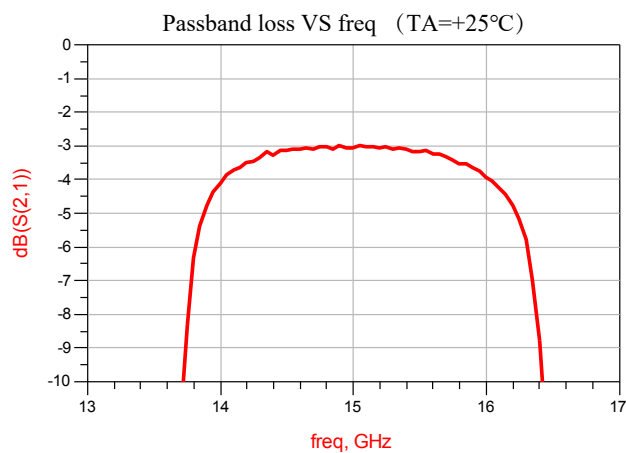
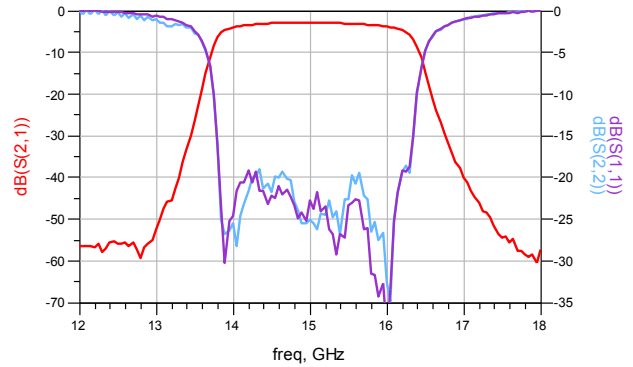
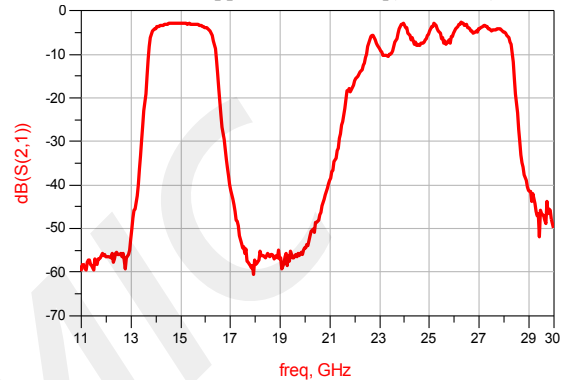
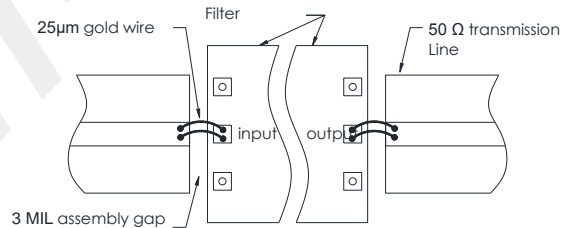
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15	-	GHz
Passband freq range	14.1	-	15.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@13.1GHz		-	dB
	≥40@17.2GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.1	-	3.2

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

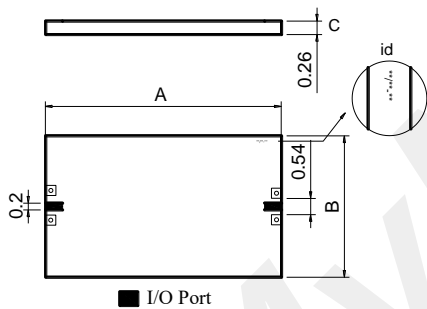
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

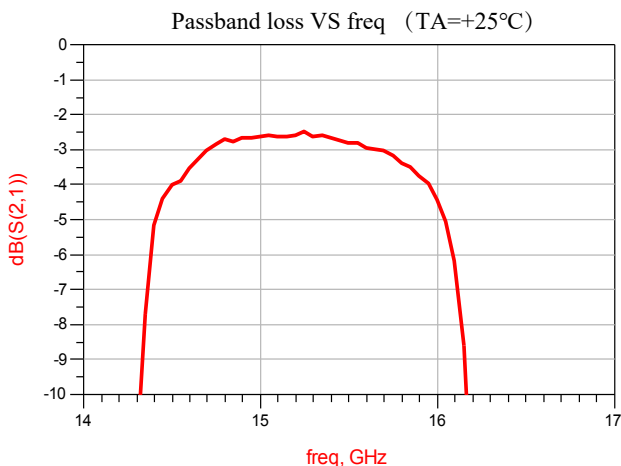
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.25	-	GHz
Passband freq range	14.7	-	15.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@13.8GHz		-	dB
	≥40@16.6GHz		-	dB

Dimensions

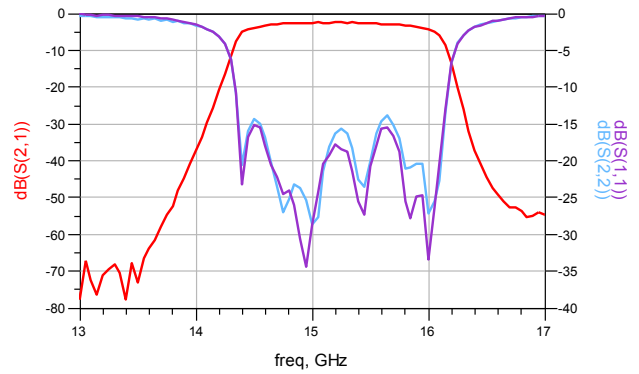


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.9	-	3

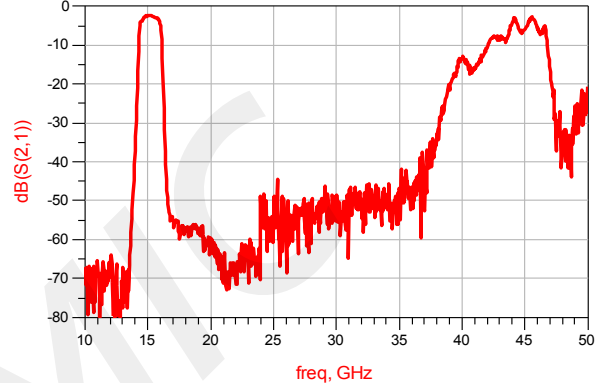
Typical test curve



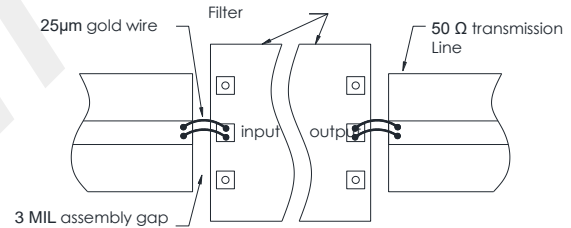
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

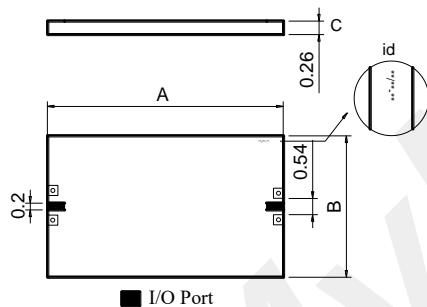
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

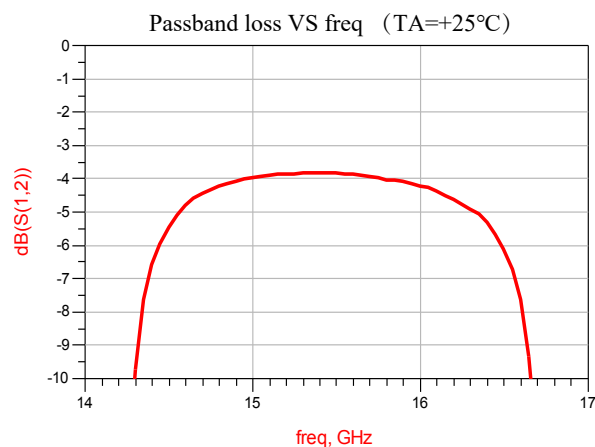
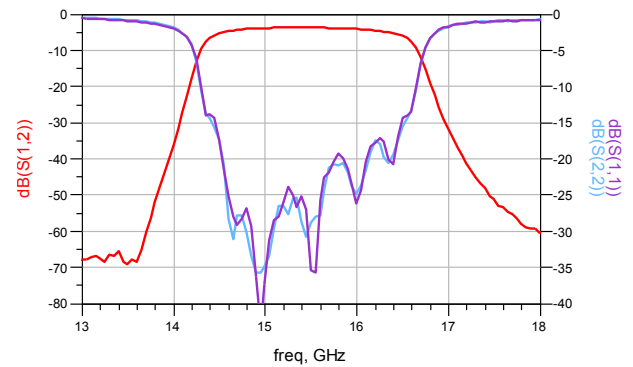
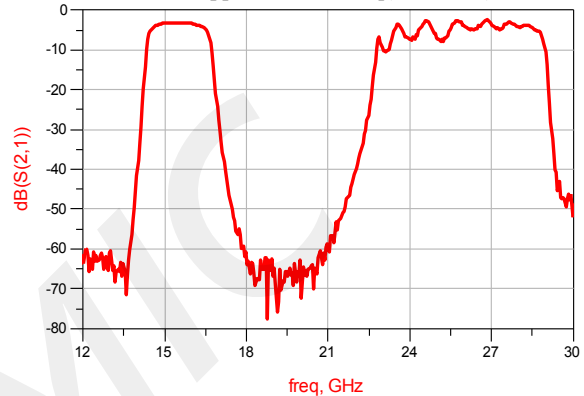
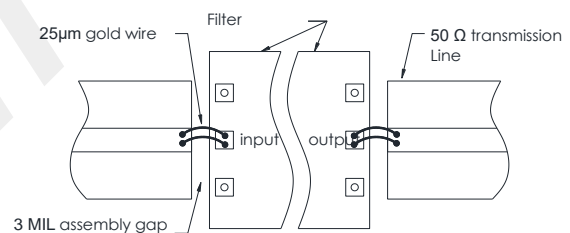
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.4	-	GHz
Passband freq range	14.7	-	16.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	4.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@13.8GHz		-	dB
	≥40@17.4GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.9	-	3

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

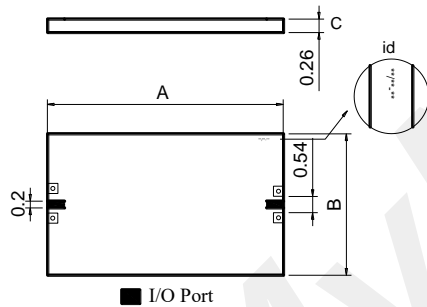
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

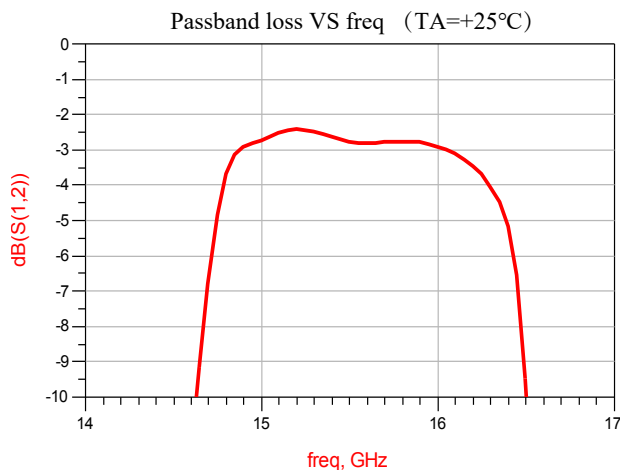
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.55	-	GHz
Passband freq range	14.9	-	16.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@13.3GHz			dB
	≥40@17.0GHz			dB

Dimensions

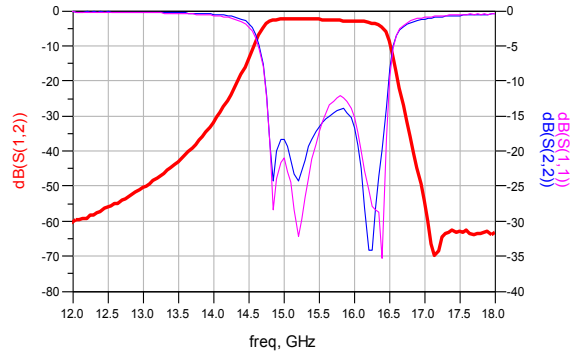


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.1	-	3.2

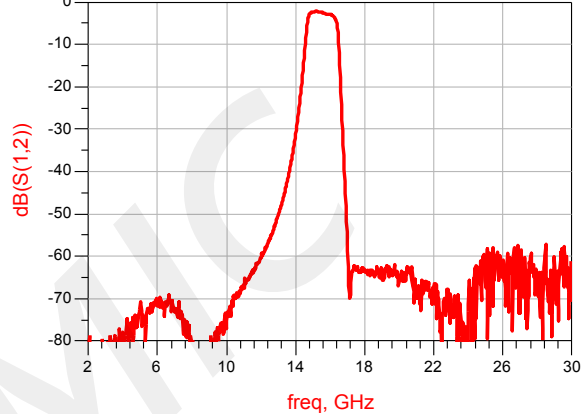
Typical test curve



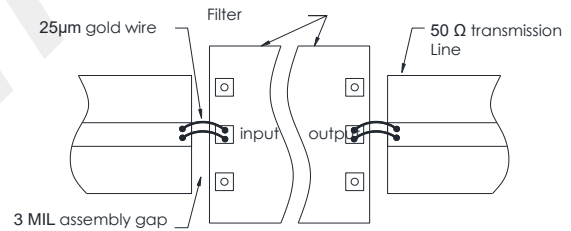
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

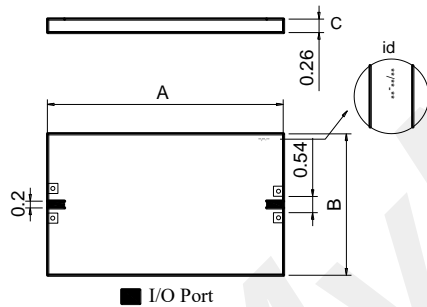
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

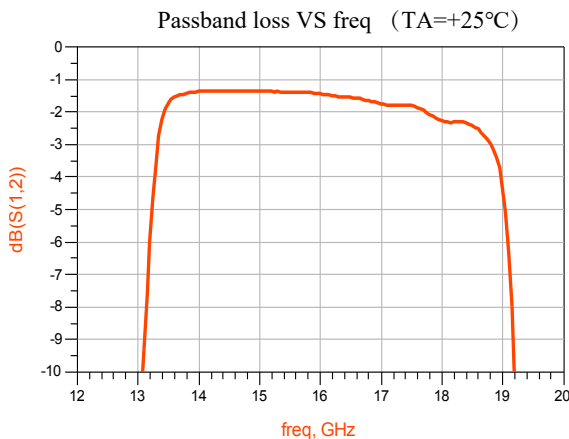
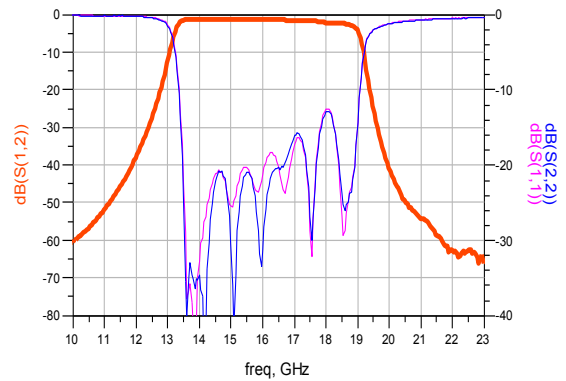
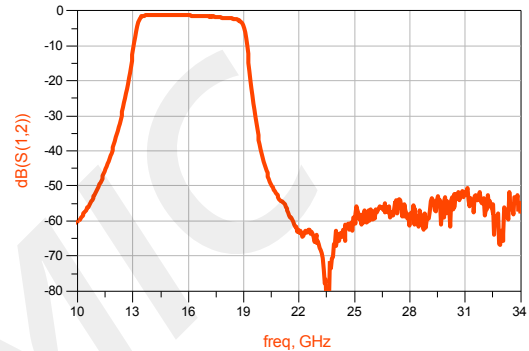
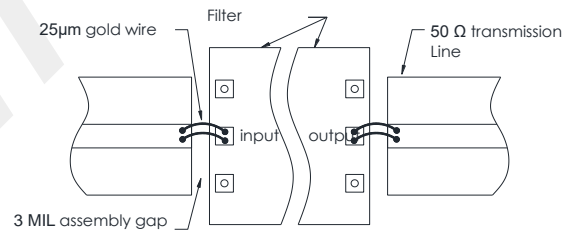
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.75	-	GHz
Passband freq range	13.45	-	17.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@11.5GHz			dB
	≥40@20.5GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.9	-	3

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
<p>Dimensions: 0.25, 1.84, 0.43, 0.63, 0.78</p>	<p>Dimensions: 0.29, 1.3, 0.31, 0.66, 0.55, 0</p>
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

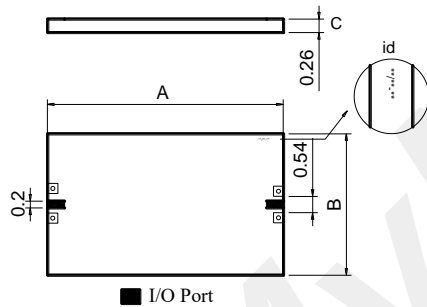
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

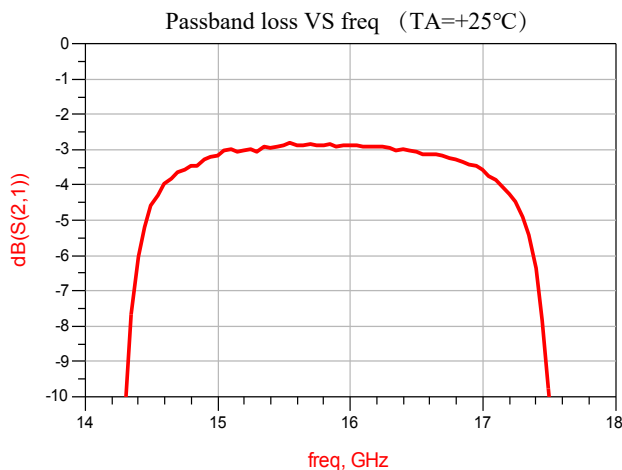
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.8	-	GHz
Passband freq range	14.8	-	16.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@13.6GHz			dB
	≥40@18.6GHz			dB

Dimensions

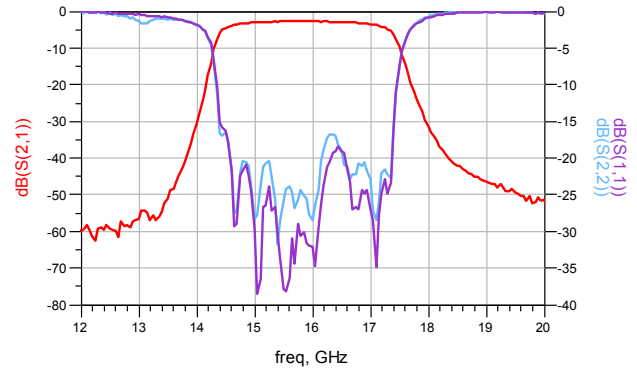


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	3.1	-	3.2

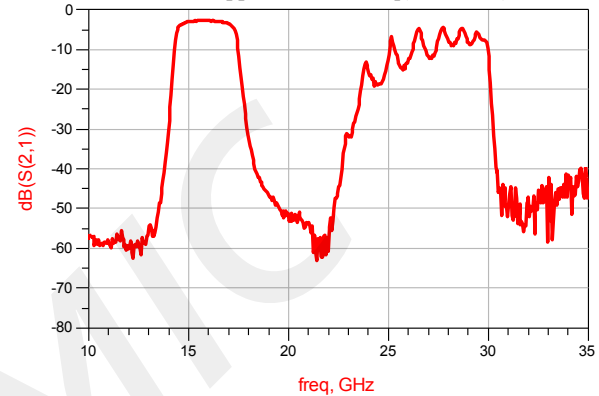
Typical test curve



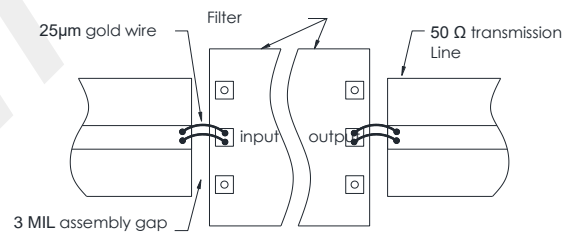
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

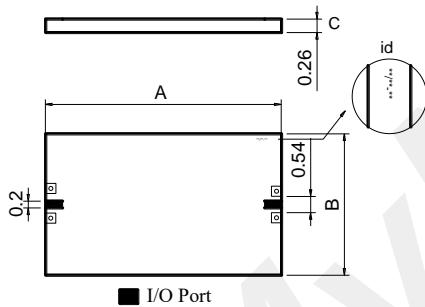
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

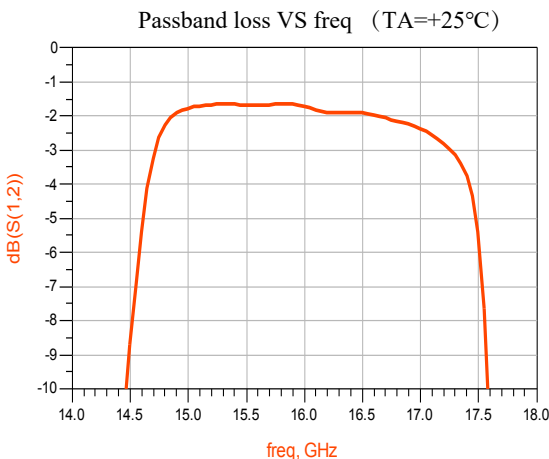
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.85	-	GHz
Passband freq range	14.9	-	16.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@13.0GHz			dB
	≥40@18.2GHz			dB

Dimensions

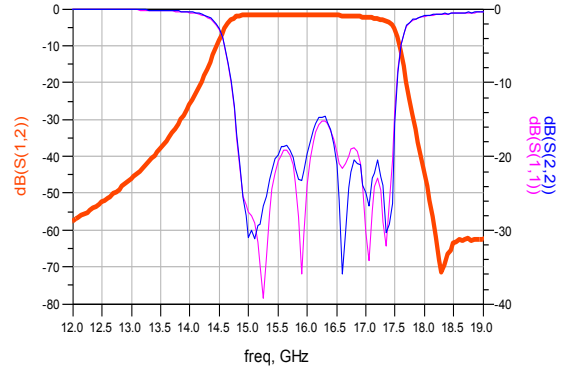


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.1	-	3.2

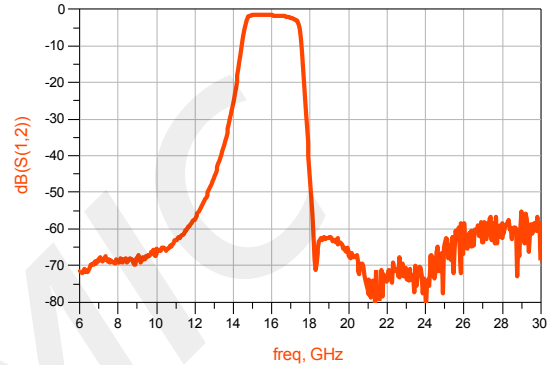
Typical test curve



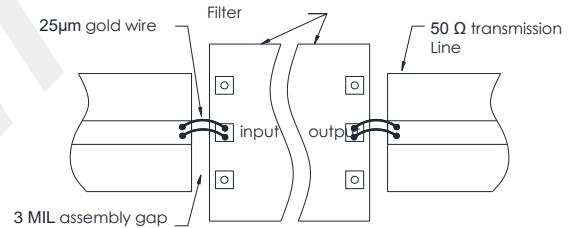
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

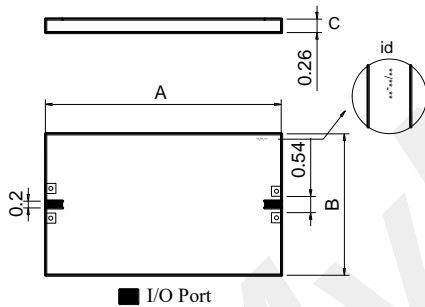
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

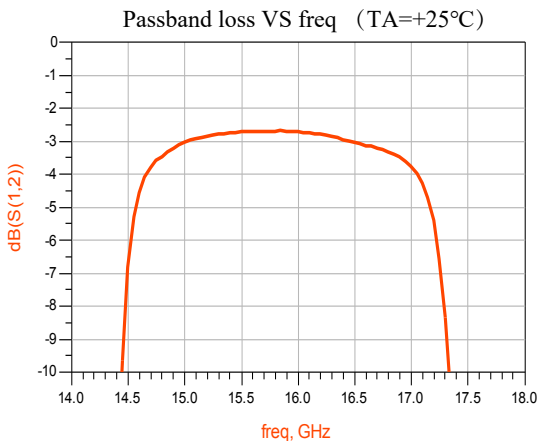
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	15.85	-	GHz
Passband freq range	14.8	-	16.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@13.8GHz		-	dB
	≥40@18.3GHz		-	dB

Dimensions

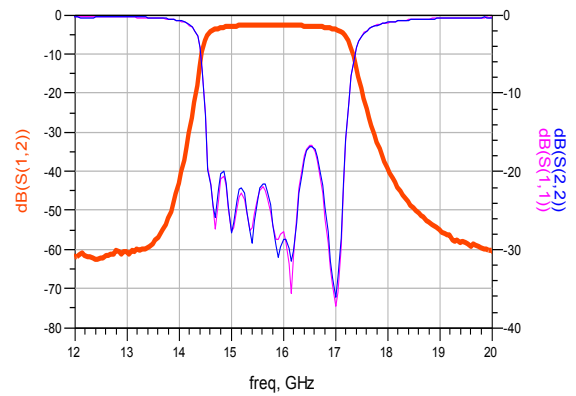


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	3.1	-	3.2

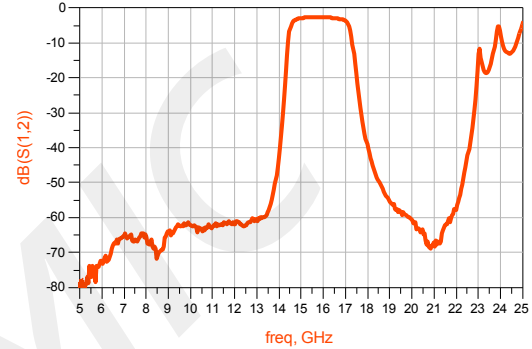
Typical test curve



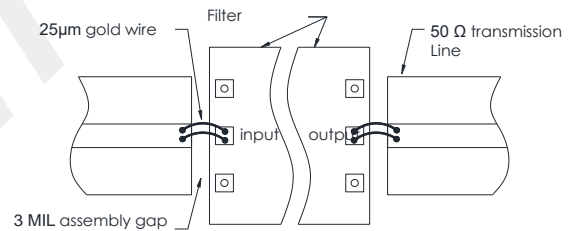
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

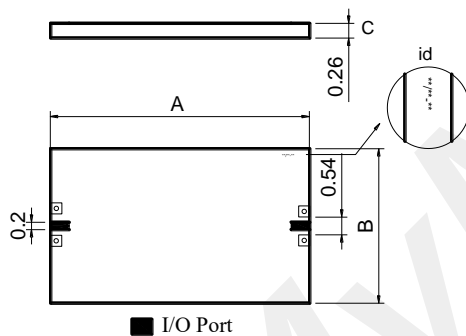
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

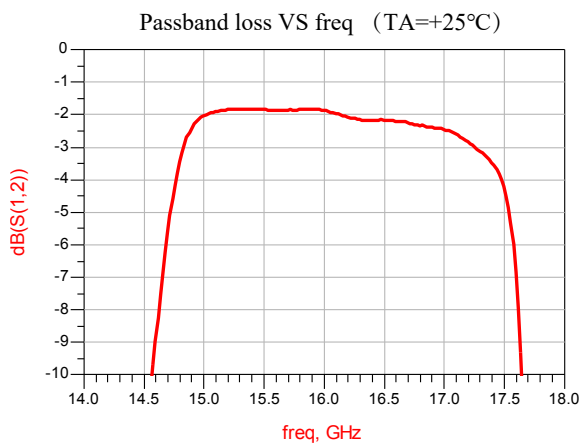
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	16	-	GHz
Passband freq range	14.9	-	17.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@13.3GHz		-	dB
	≥40@18.2GHz		-	dB

Dimensions

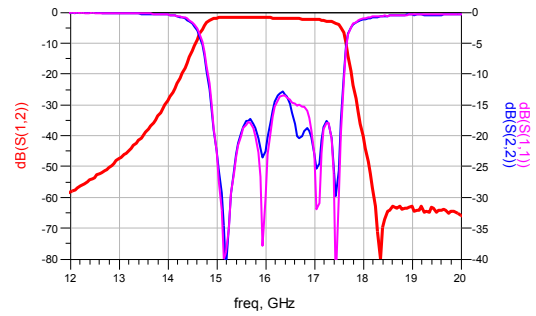


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.1	-	3.2

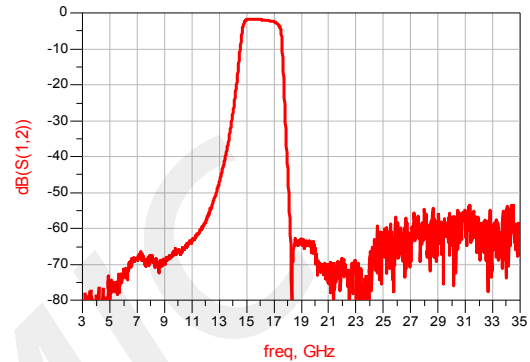
Typical test curve



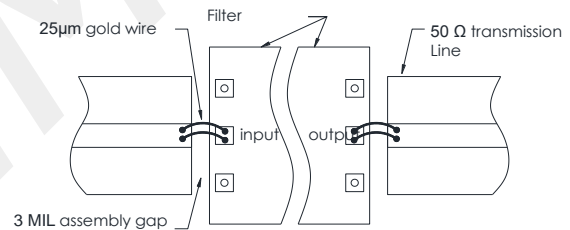
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

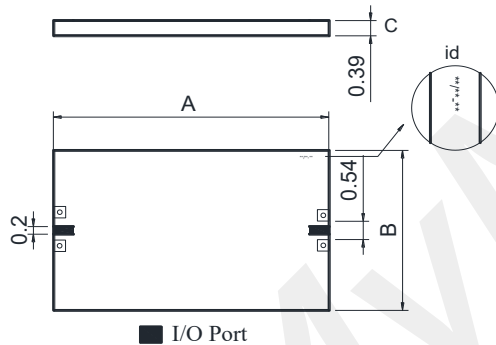
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

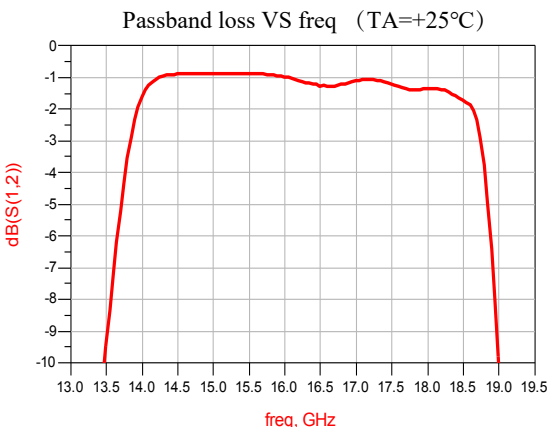
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	16.25	-	GHz
Passband freq range	14	-	18.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥35@11.75GHz		-	dB
	≥35@20.2GHz		-	dB

Dimensions

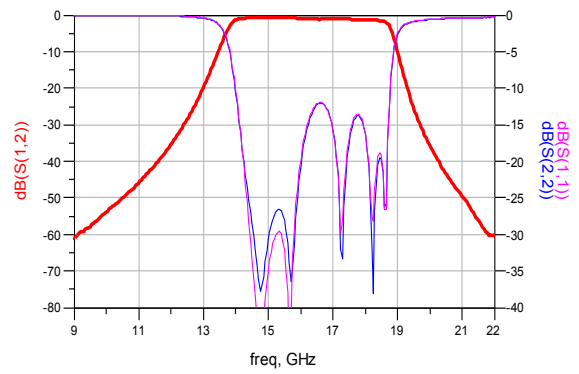


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.8	-	2.9

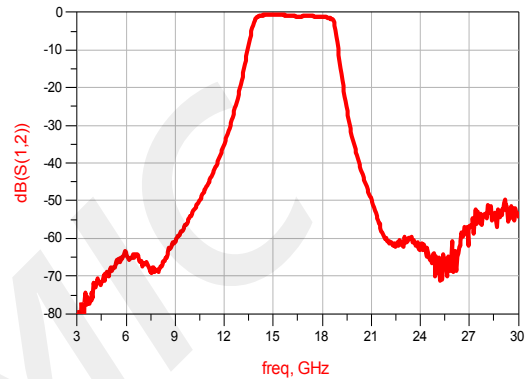
Typical test curve



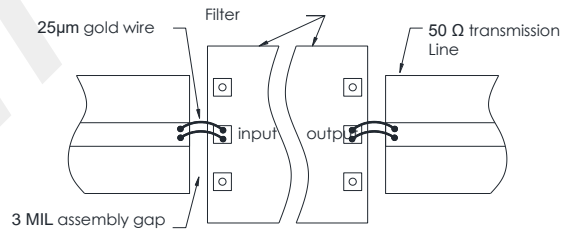
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

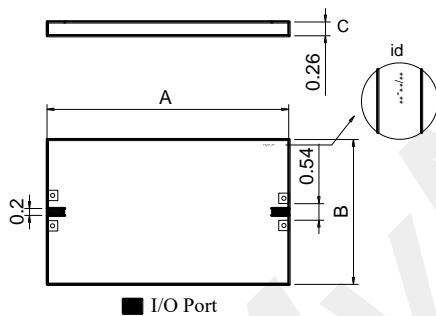
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

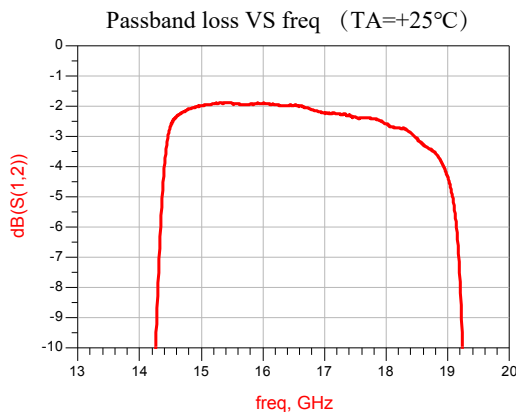
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	16.3	-	GHz
Passband freq range	14.6	-	18.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@13.2GHz		-	dB
	≥40@19.8GHz		-	dB

Dimensions

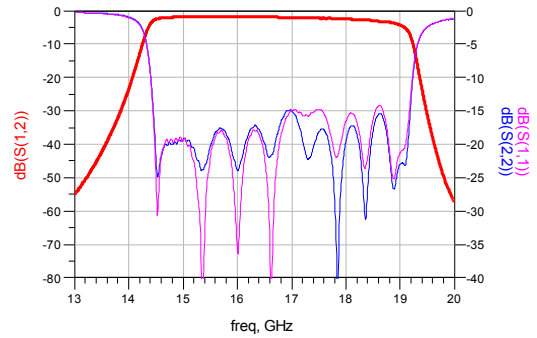


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	3.1	-	3.2

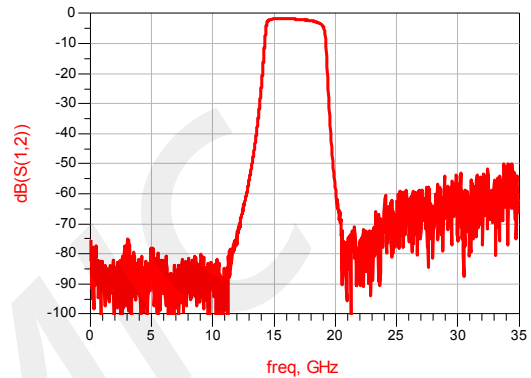
Typical test curve



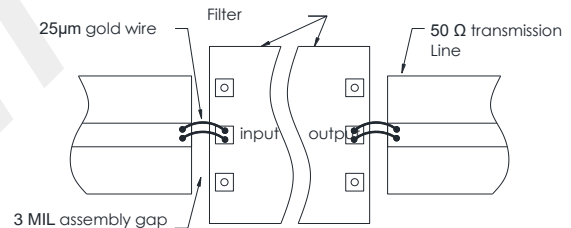
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

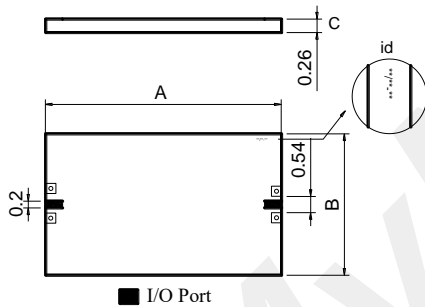
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

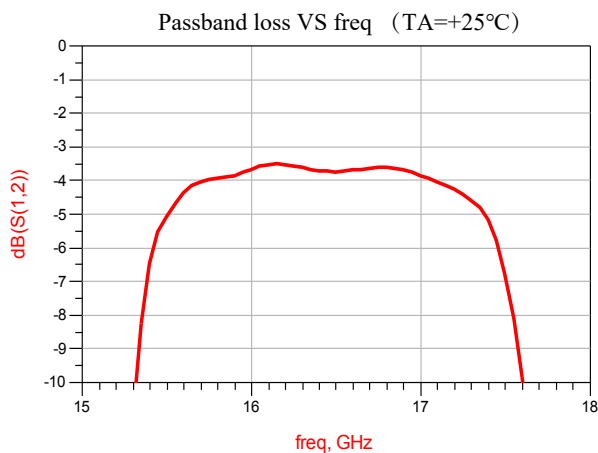
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	16.4	-	GHz
Passband freq range	15.7	-	17.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss		4.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@14.6GHz			dB
	≥40@18.6GHz			dB

Dimensions

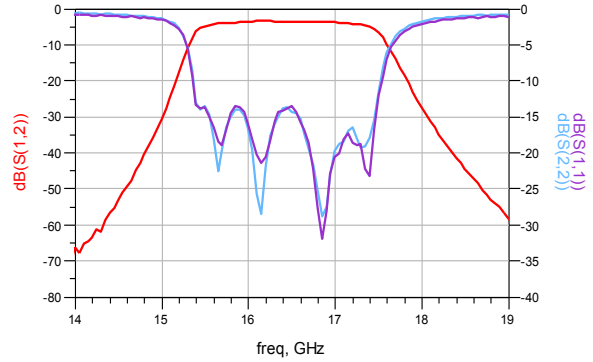


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.9	-	3

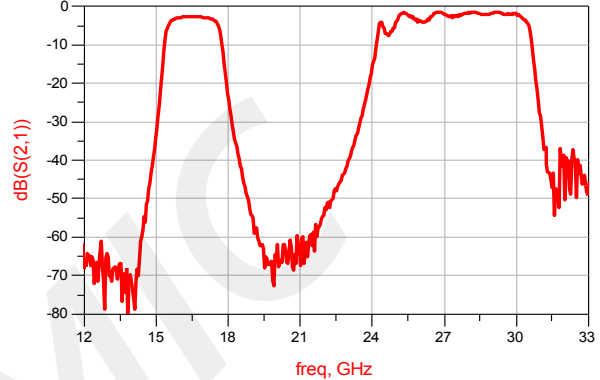
Typical test curve



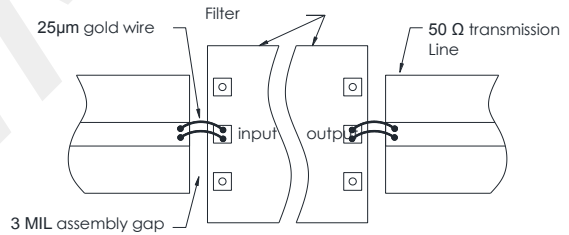
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

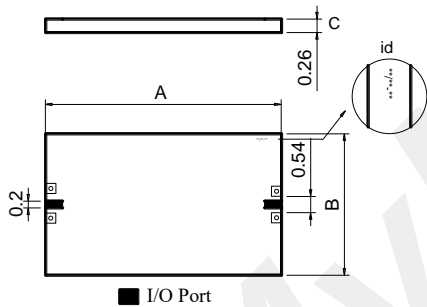
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

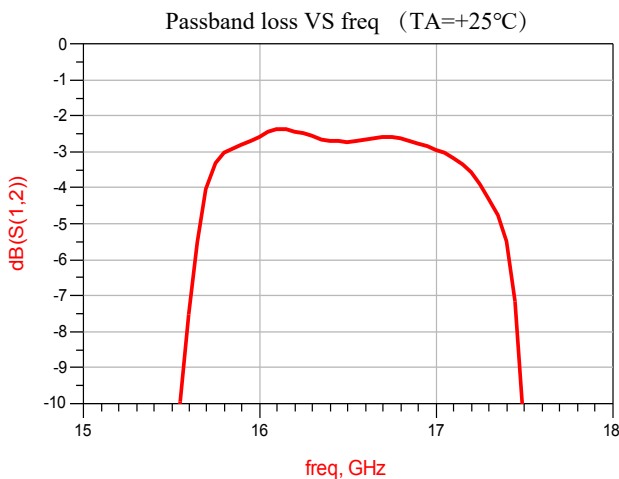
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	16.45	-	GHz
Passband freq range	15.8	-	17.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@14.3GHz		-	dB
	≥40@18.0GHz		-	dB

Dimensions

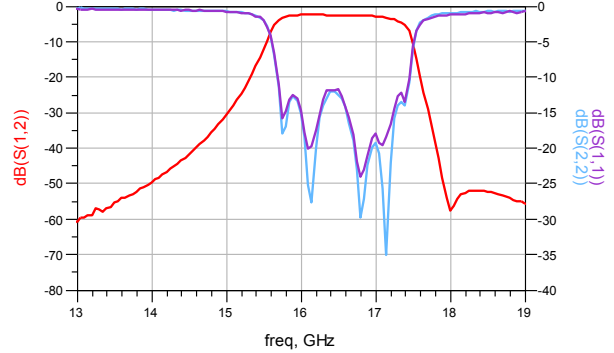


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	3.1	-	3.2

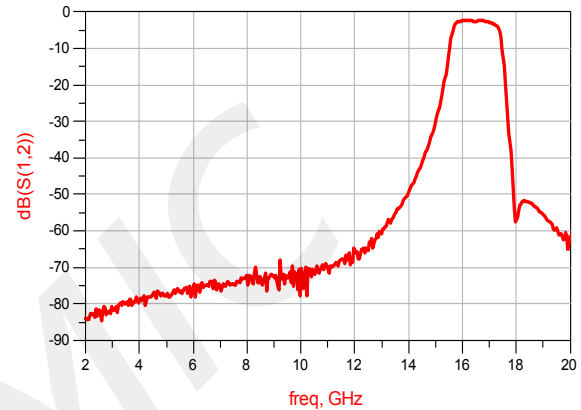
Typical test curve



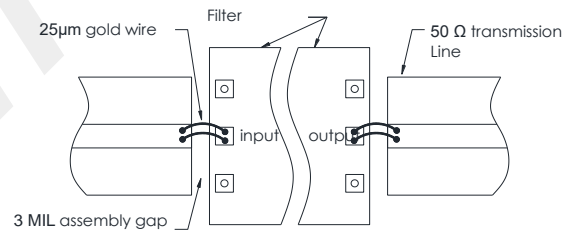
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

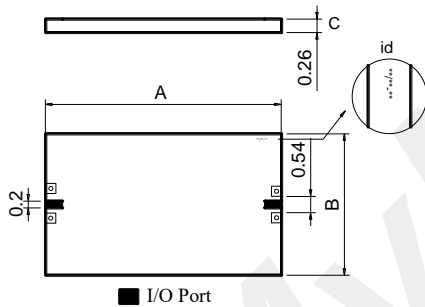
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

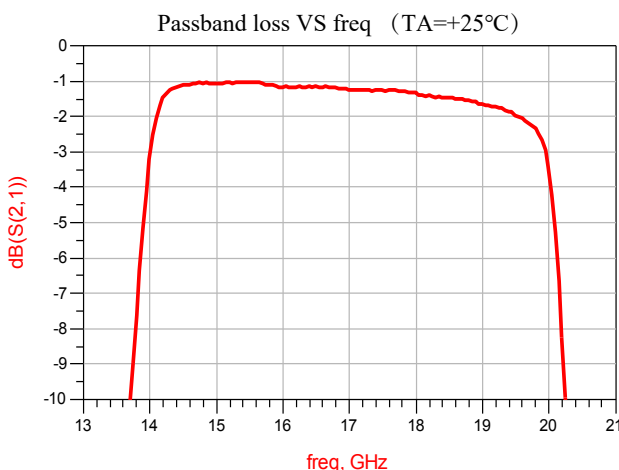
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	16.65	-	GHz
Passband freq range	14.2	-	19.1	GHz
in-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
return loss	-	17	-	dB
Out-of-band atten	≥40@11.2GHz		-	dB
	≥40@22GHz		-	dB

Dimensions

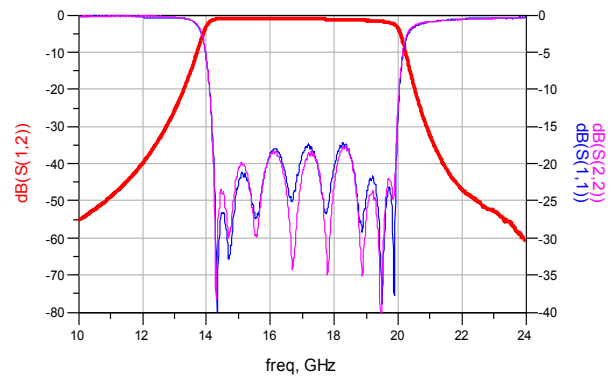


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	2.6	-	2.7

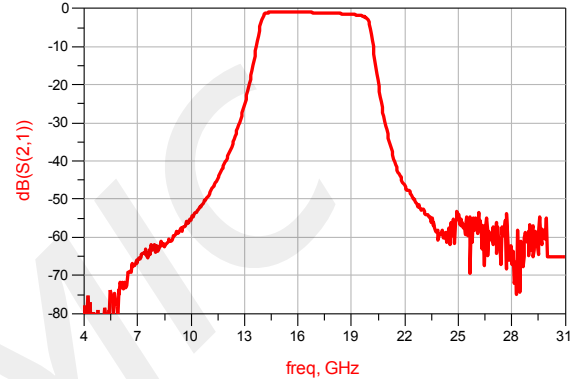
Typical test curve



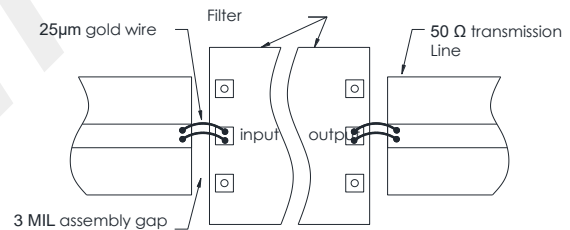
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

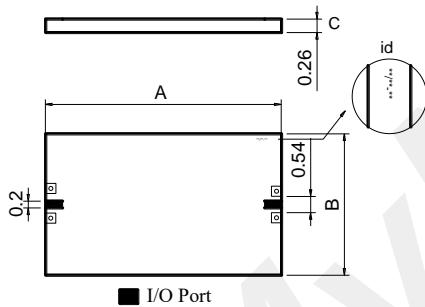
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

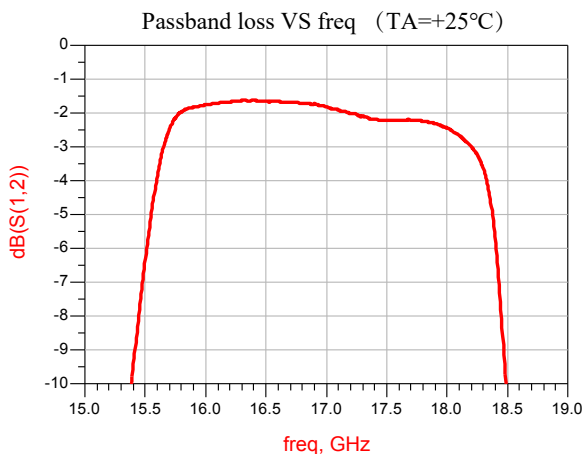
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17	-	GHz
Passband freq range	15.8	-	18	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@13.5GHz			dB
	≥40@19.2GHz			dB

Dimensions

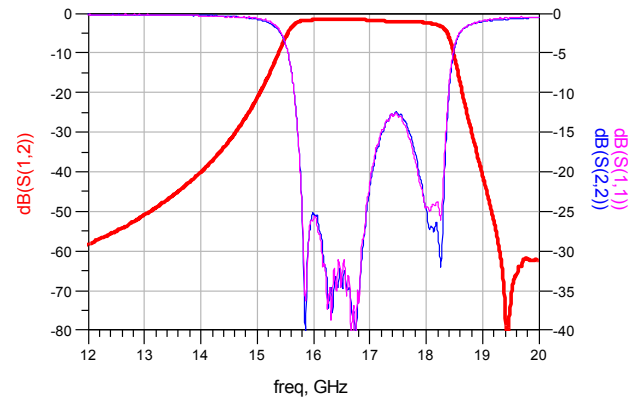


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.9	-	3

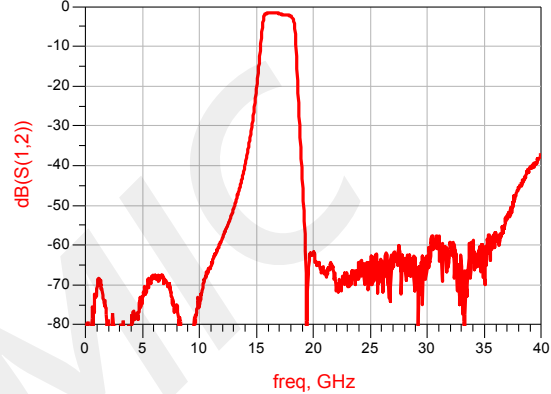
Typical test curve



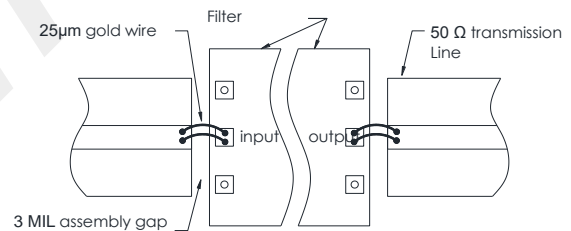
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

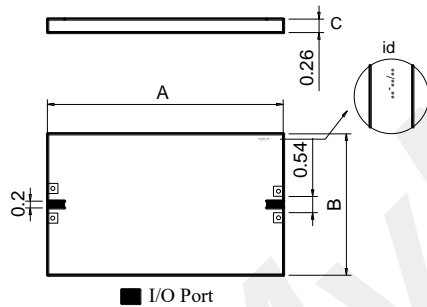
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

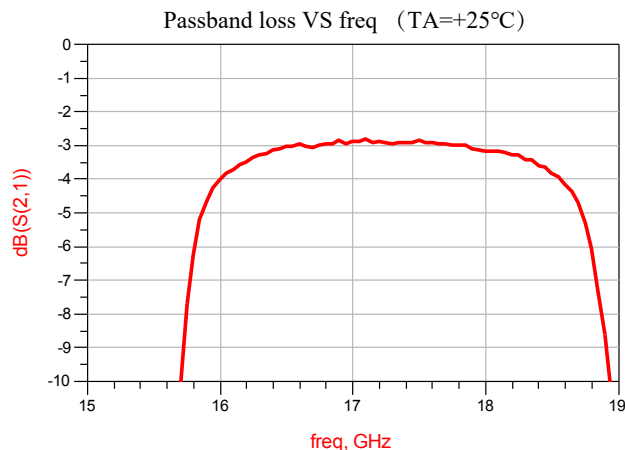
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17.2	-	GHz
Passband freq range	16.2	-	18.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	21	-	dB
Out-of-band atten	≥40@15.0GHz			dB
	≥40@20.2GHz			dB

Dimensions

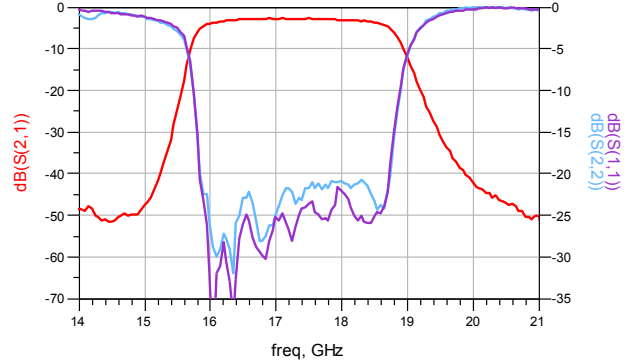


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.9	-	3

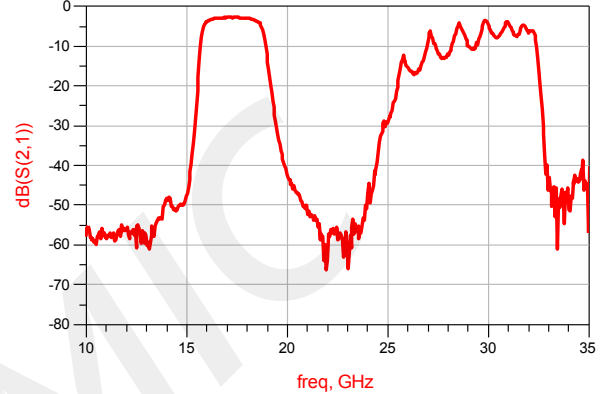
Typical test curve



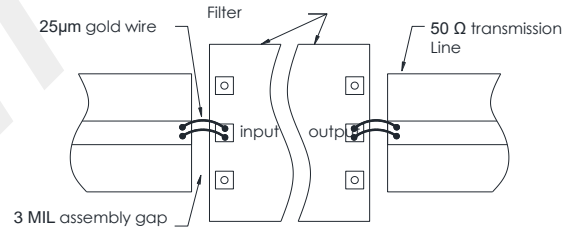
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

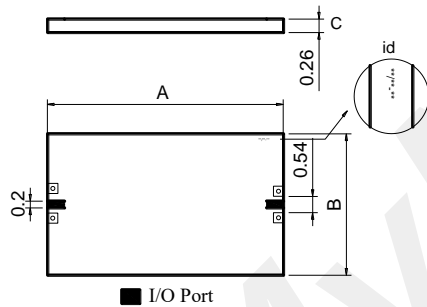
- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

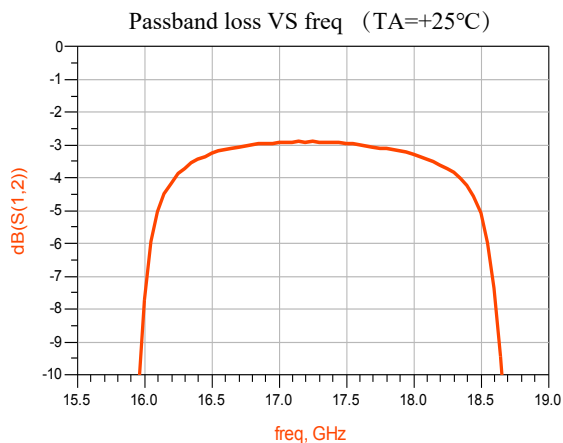
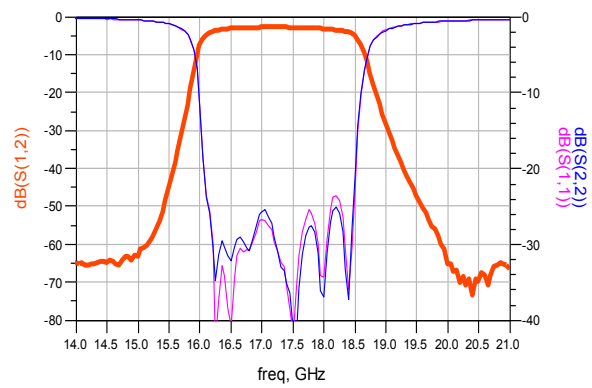
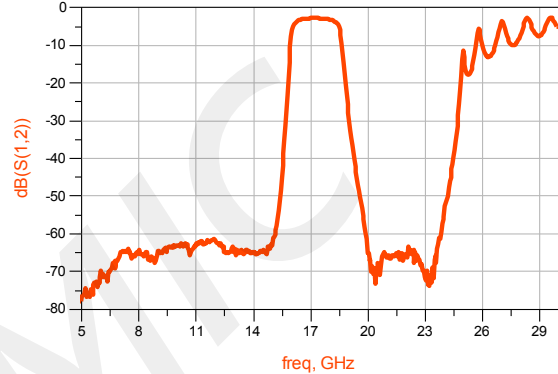
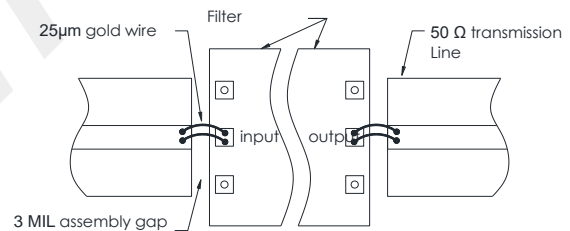
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17.25	-	GHz
Passband freq range	16.3	-	18.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	23	-	dB
Out-of-band atten	≥40@15.3GHz			dB
	≥40@19.5GHz			dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.9	-	3

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

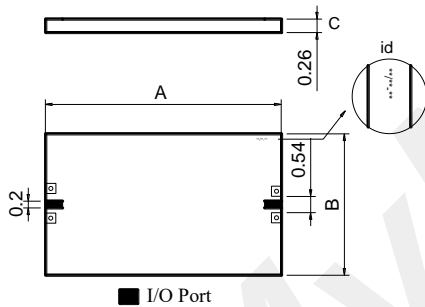
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

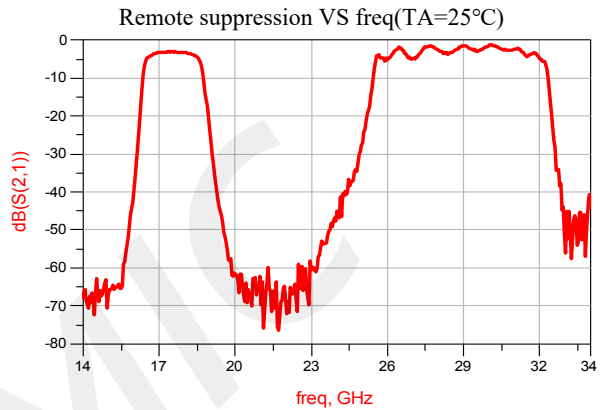
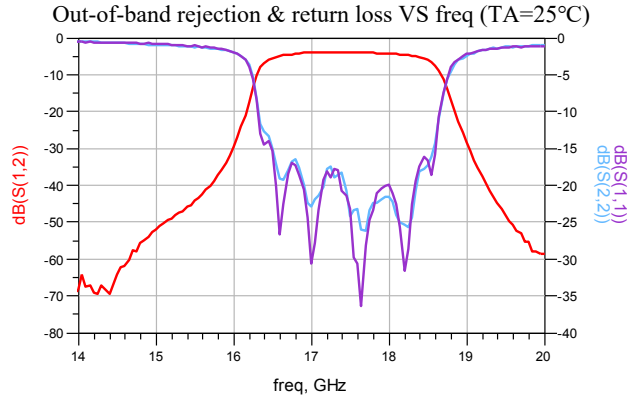
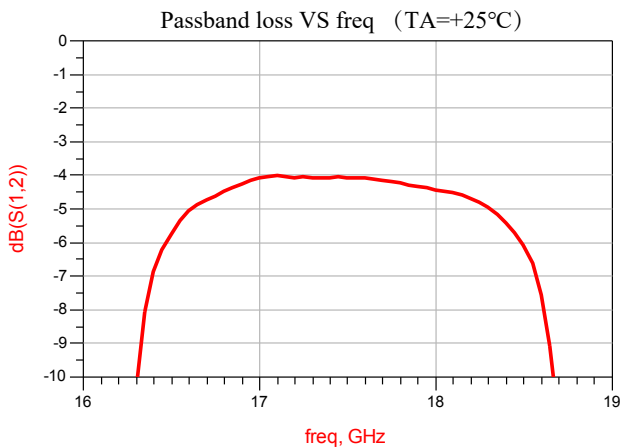
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17.45	-	GHz
Passband freq range	16.7	-	18.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss		4.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@15.5GHz			dB
	≥40@19.5GHz			dB

Dimensions

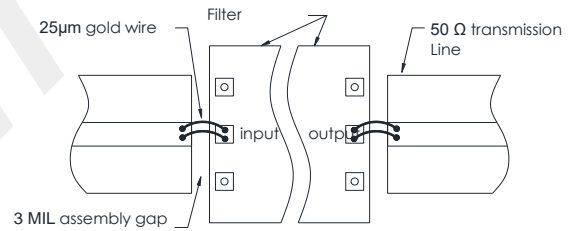


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.9	-	3

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

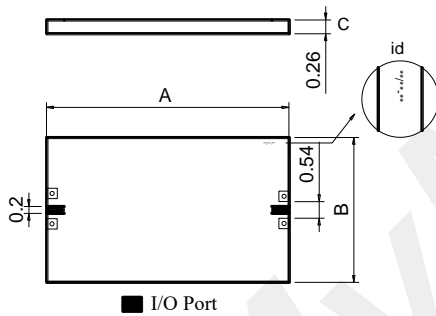
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

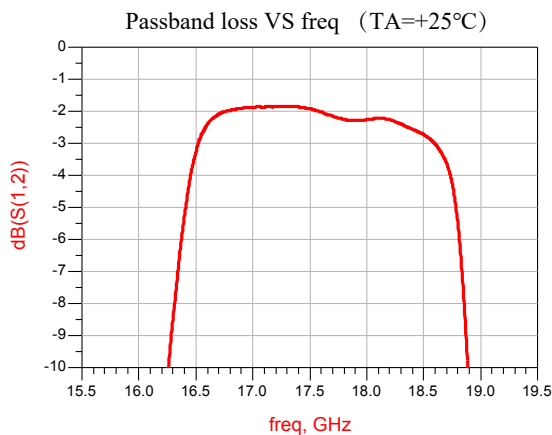
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17.5	-	GHz
Passband freq range	16.8	-	18.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@15.0GHz		-	dB
	≥40@19.7GHz		-	dB

Dimensions

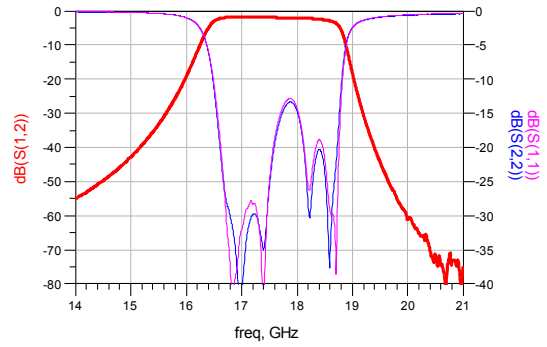


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7.0
B	2.9	-	3.0

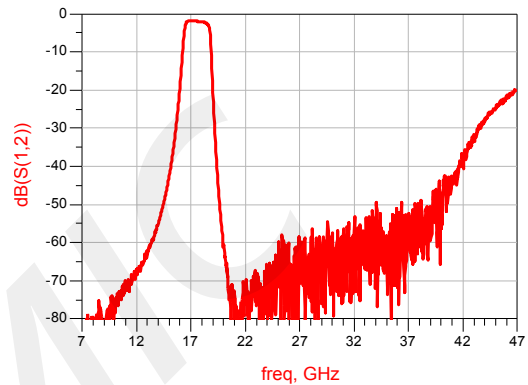
Typical test curve



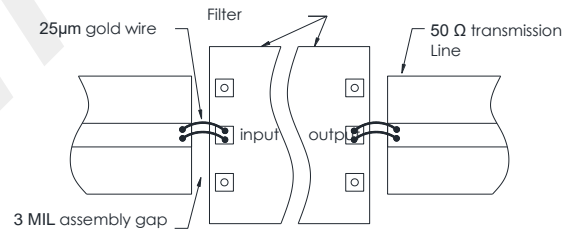
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

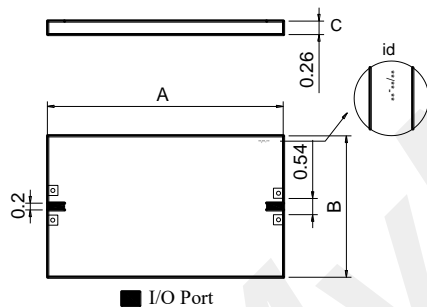
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

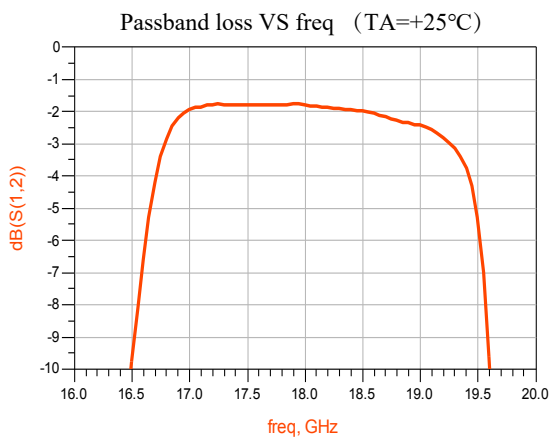
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	17.95	-	GHz
Passband freq range	16.95	-	19.05	GHz
In-band ripple	-	-	1	dB
Center insertion loss		2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@15.0GHz			dB
	≥40@20.25GHz			dB

Dimensions

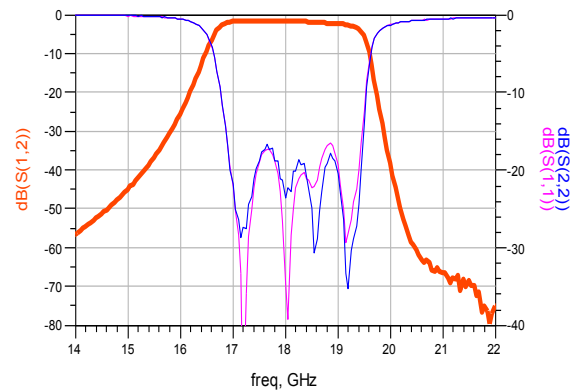


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.9	-	3

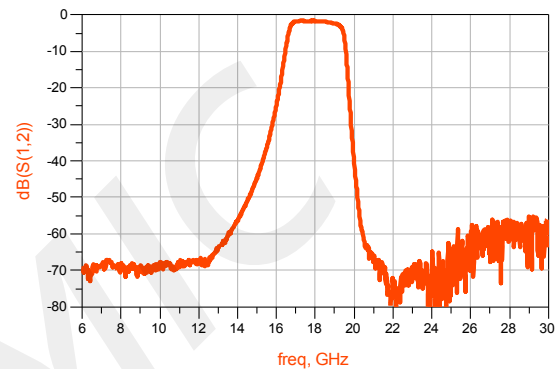
Typical test curve



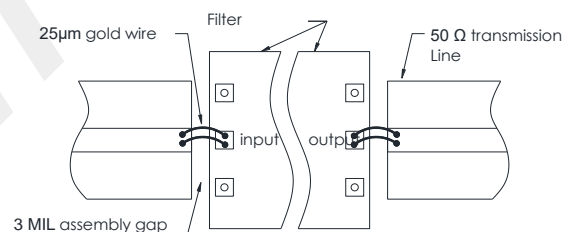
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

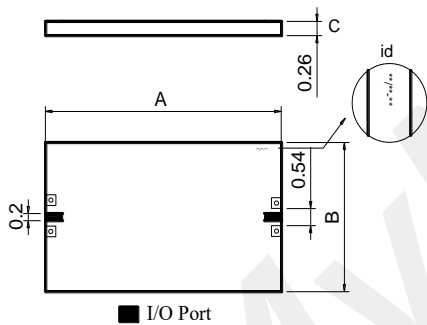
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

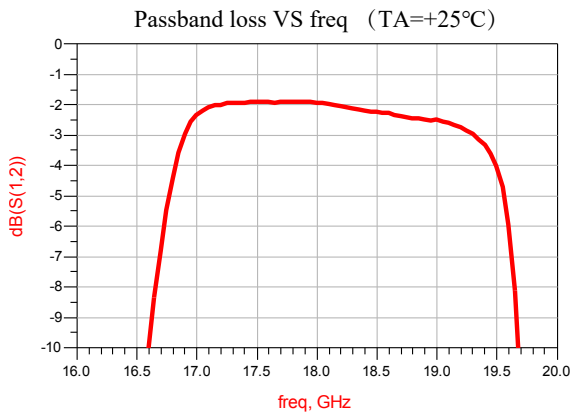
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	18.1	-	GHz
Passband freq range	17	-	19.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@15.0GHz		-	dB
	≥40@20.3GHz		-	dB

Dimensions

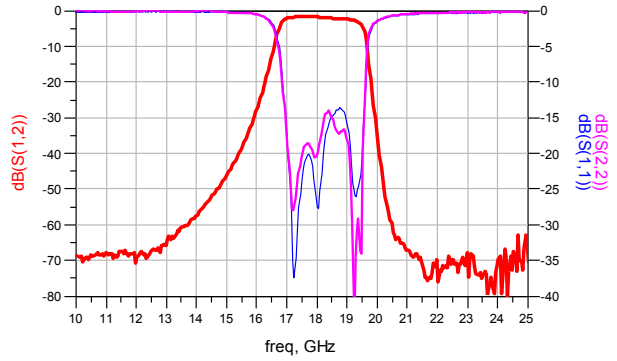


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.9	-	3

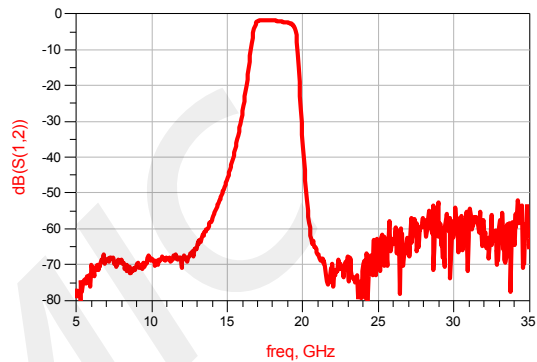
Typical test curve



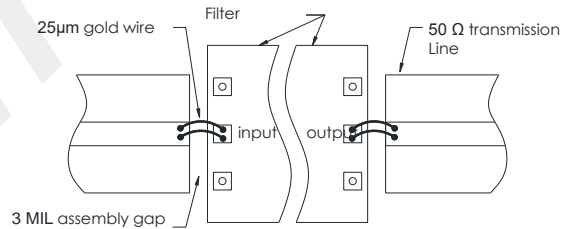
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

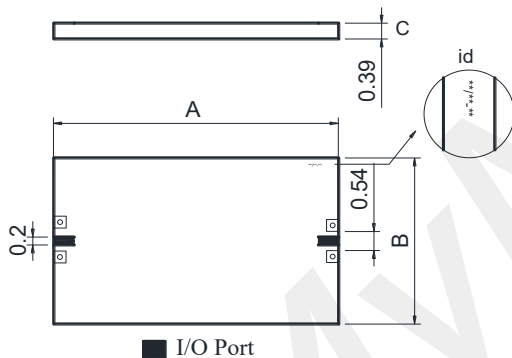
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

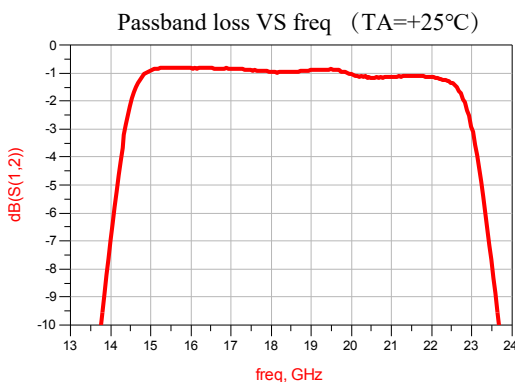
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	18.75	-	GHz
Passband freq range	14.75	-	22.75	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.3	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@9GHz			dB
	≥40@30GHz			dB

Dimensions

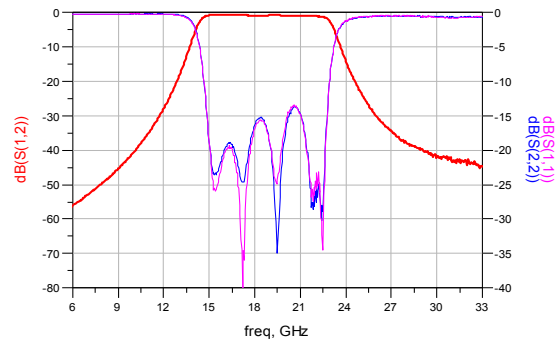


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.4	-	4.5
B	2.9	-	3

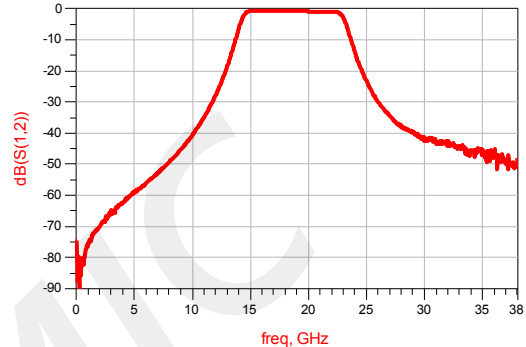
Typical test curve



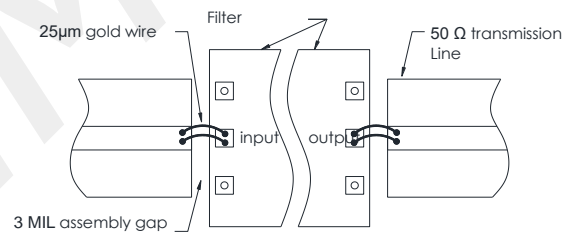
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

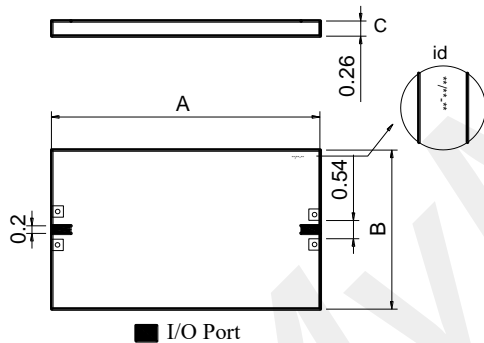
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

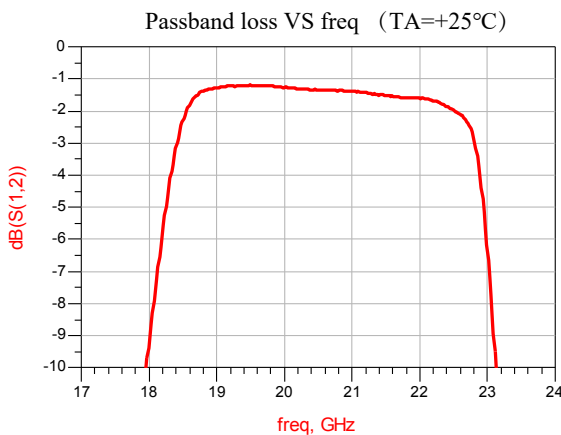
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	20.6	-	GHz
Passband freq range	18.6	-	22.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@15.0GHz		-	dB
	≥40@24.5GHz		-	dB

Dimensions

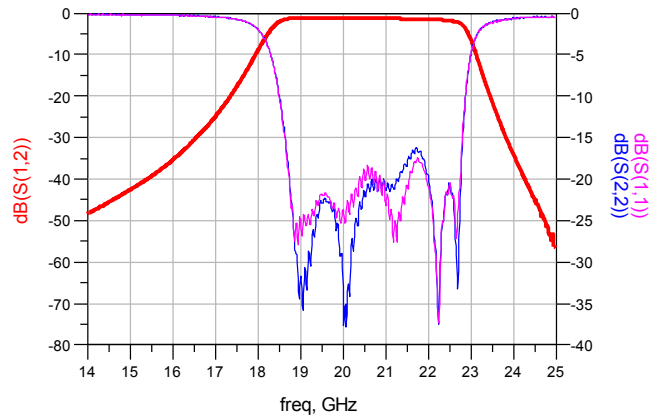


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	2.4	-	2.5

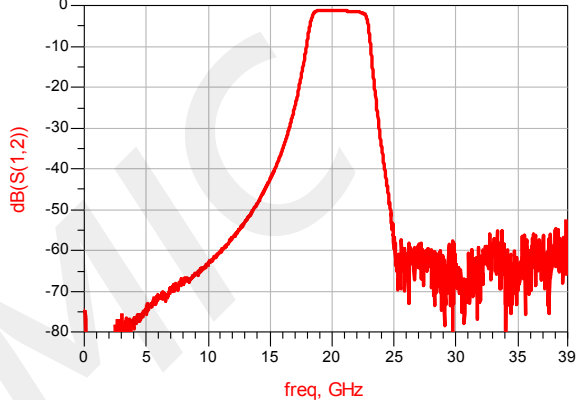
Typical test curve



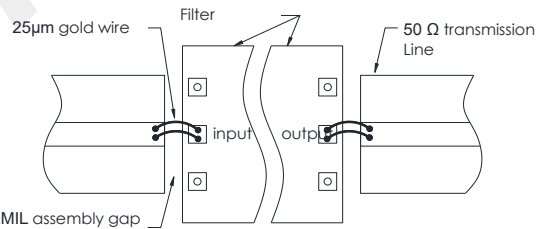
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

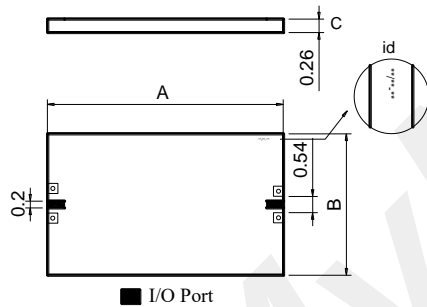
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

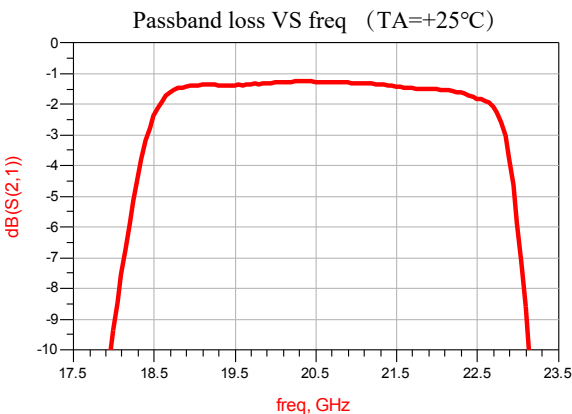
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	20.65	-	GHz
Passband freq range	19.0	-	22.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@15.0GHz		-	dB
	≥40@24.5GHz		-	dB

Dimensions

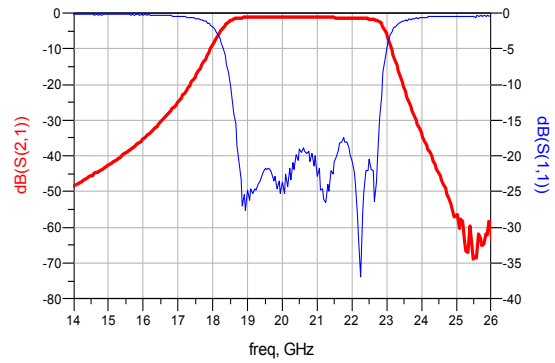


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	2.4	-	2.5

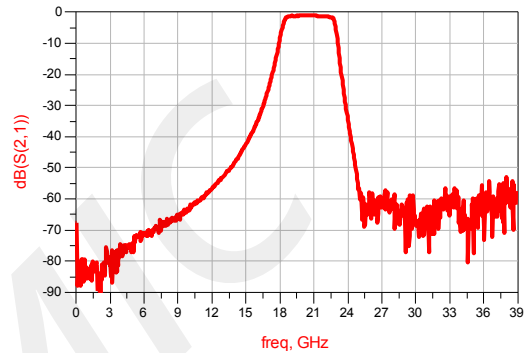
Typical test curve



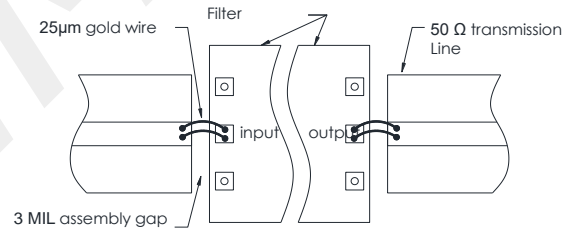
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

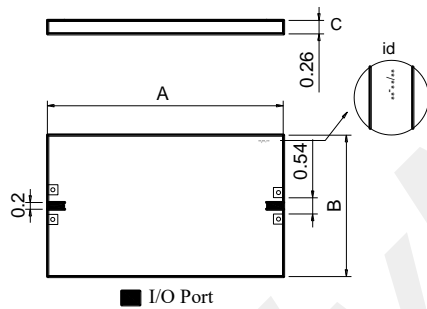
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

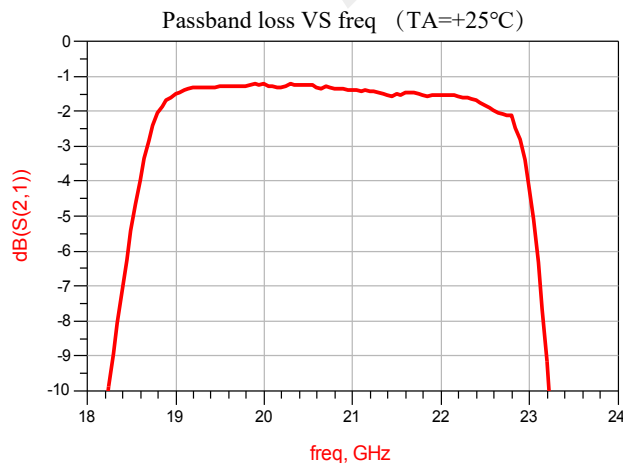
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	20.75	-	GHz
Passband freq range	19.0	-	22.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@15.0GHz			dB
	≥40@24.5GHz			dB

Dimensions

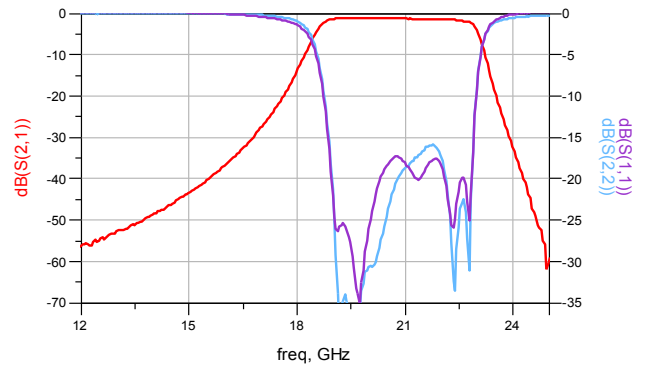


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	2.4	-	2.5

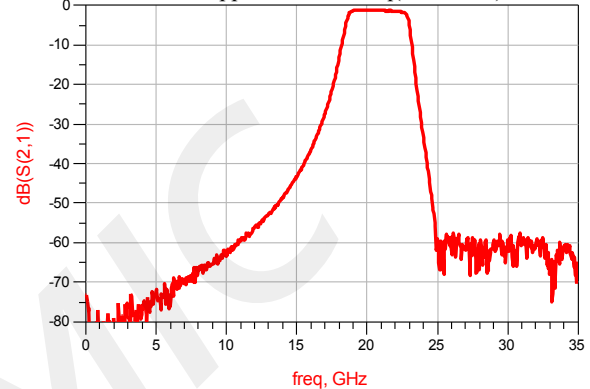
Typical test curve



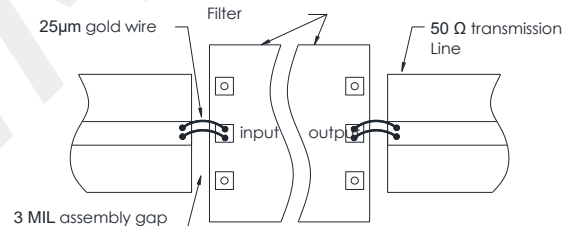
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

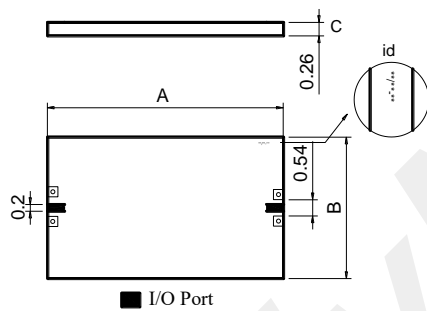
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

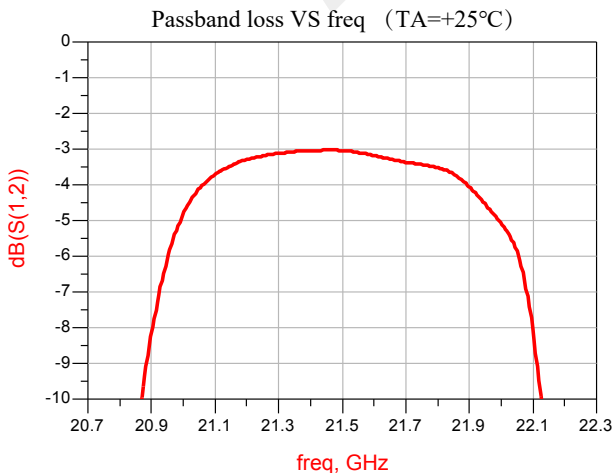
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	21.5	-	GHz
Passband freq range	21.15	-	21.85	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@20.3GHz		-	dB
	≥40@22.7GHz		-	dB

Dimensions

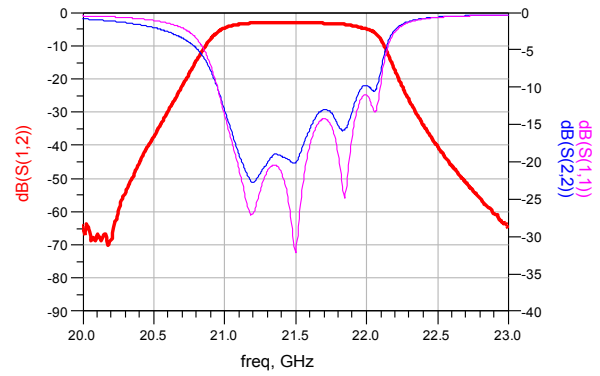


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.9	-	11
B	3.4	-	3.5

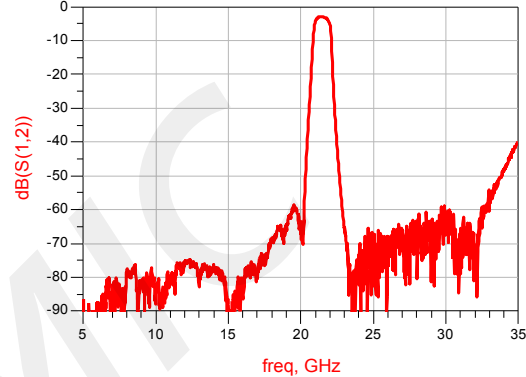
Typical test curve



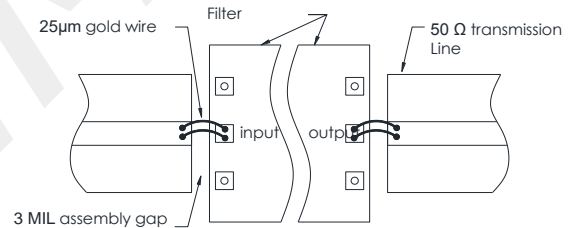
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

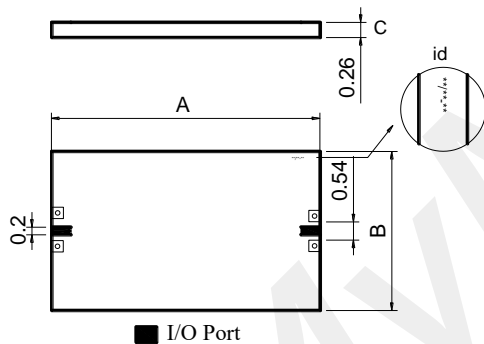
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

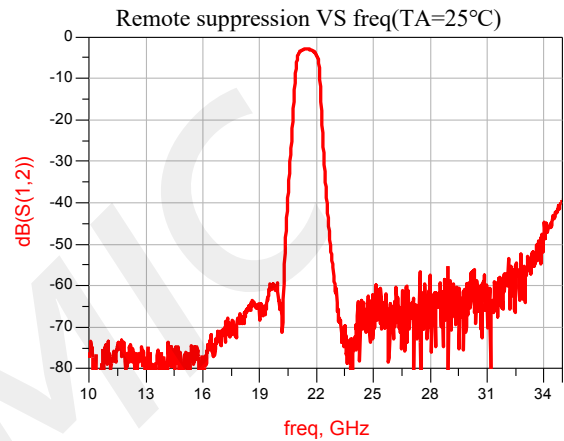
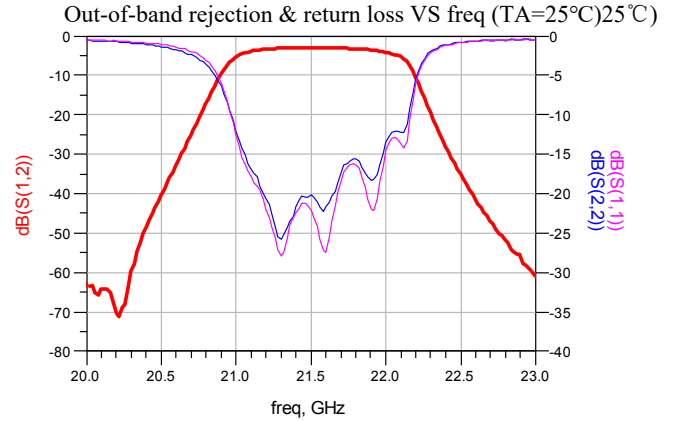
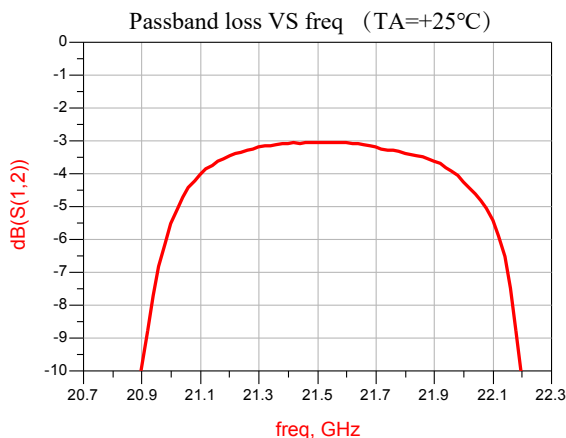
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	21.55	-	GHz
Passband freq range	21.2	-	21.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	16	-	dB
Out-of-band atten	≥40@20.3GHz			dB
	≥40@22.8GHz			dB

Dimensions

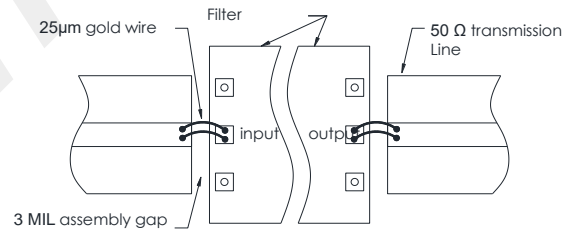


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.9	-	11
B	3.4	-	3.5

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

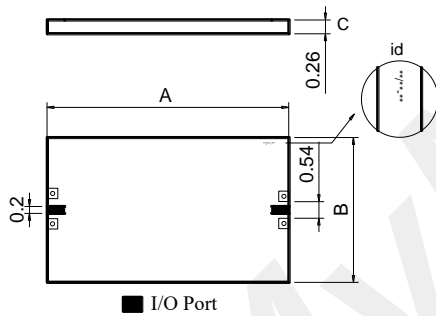
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

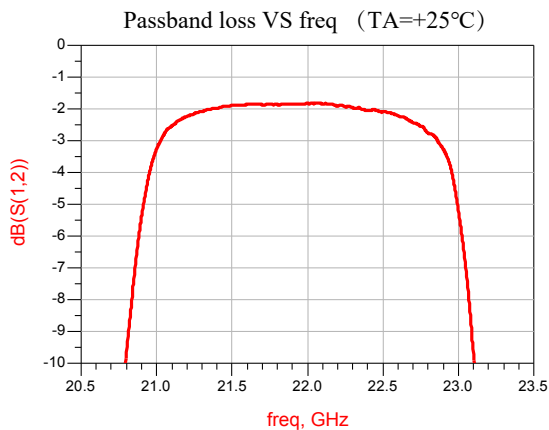
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	21.9	-	GHz
Passband freq range	21.1	-	22.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@20.0GHz		-	dB
	≥40@24.0GHz		-	dB

Dimensions

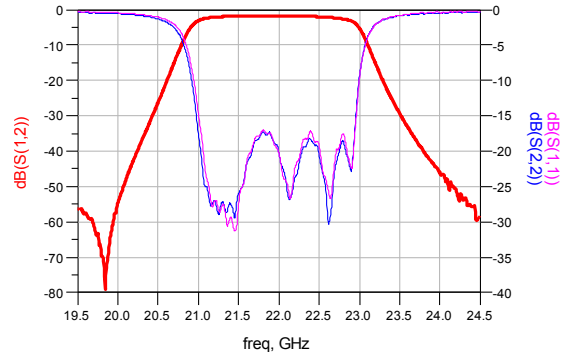


Size symbol	Value(mm)		
	Min	Nominal	Max
A	9.4	-	9.5
B	3.1	-	3.2

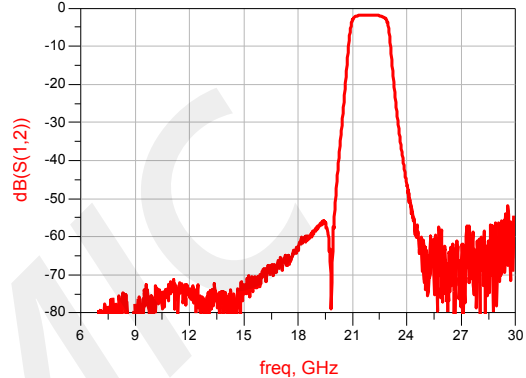
Typical test curve



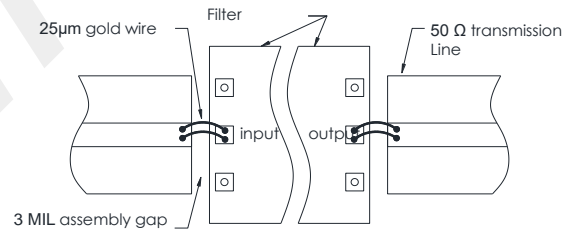
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

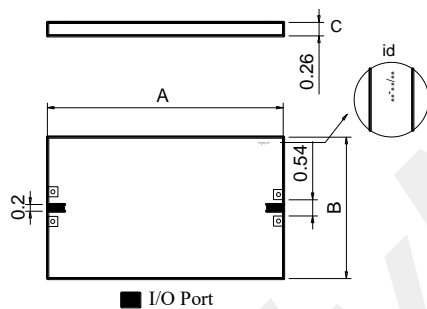
- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

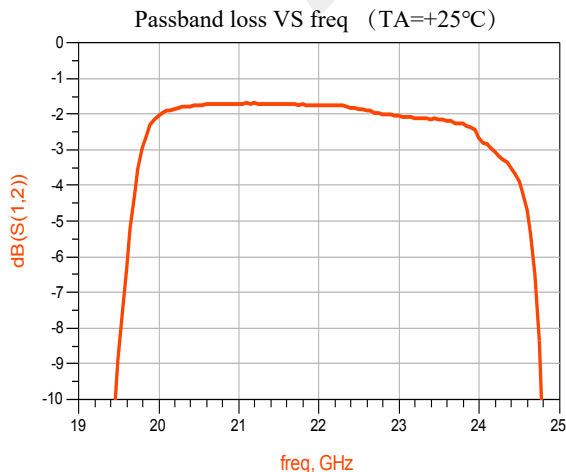
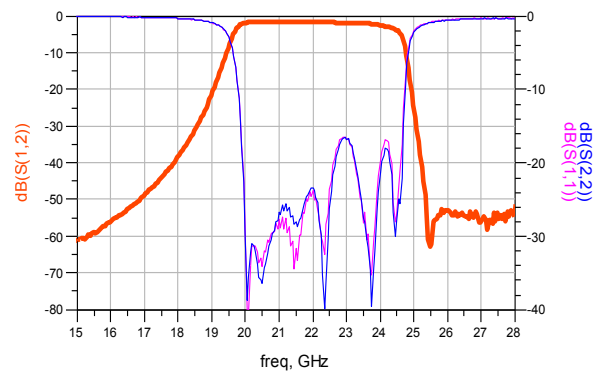
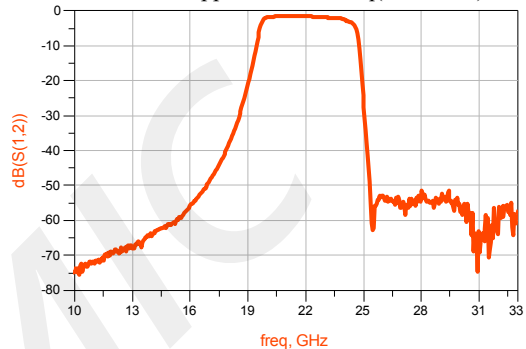
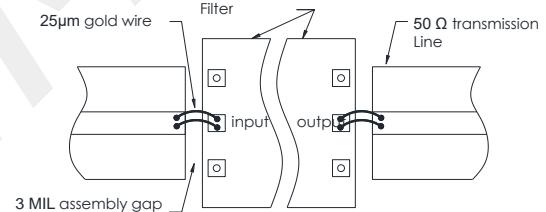
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	21.9	-	GHz
Passband freq range	19.9	-	23.9	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@17.5GHz		-	dB
	≥40@25.5GHz		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.7	-	2.8

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

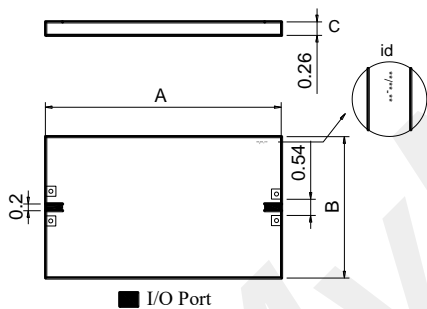
Environmental parameters

Operation temperature	-55℃~+85℃
Storage temperature	-55℃~+125℃
Max input Power	35dBm

Electrical Specification(T_A=+25℃)

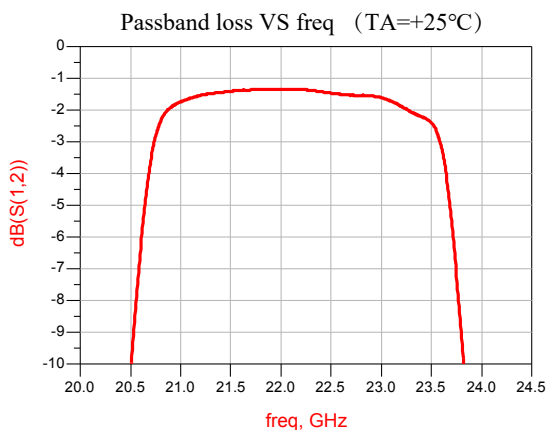
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	22.15	-	GHz
Passband freq range	20.9	-	23.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@19.6GHz		-	dB
	≥40@25.2GHz		-	dB

Dimensions

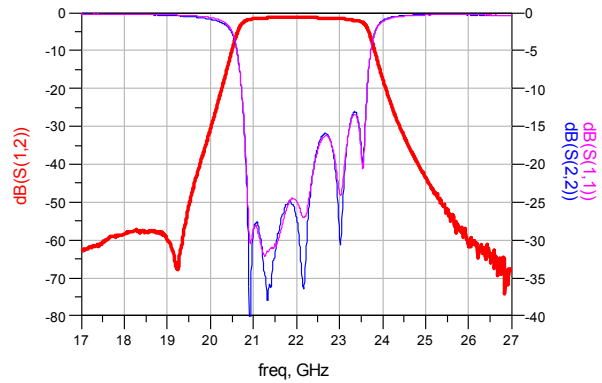


Size symbol	Value(mm)		
	Min	Nominal	Max
A	9.9	-	10
B	3.4	-	3.5

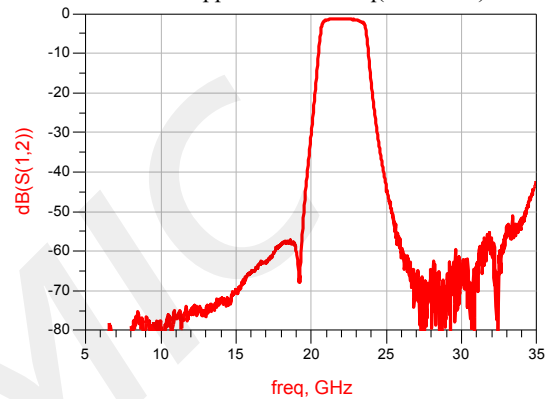
Typical test curve



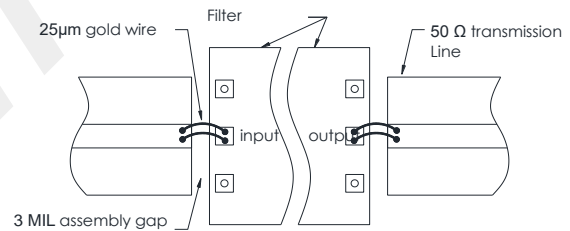
Out-of-band rejection & return loss VS freq (TA=25℃)



Remote suppression VS freq(TA=25℃)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	
Applicable Freq: DC-32GHz	
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications .

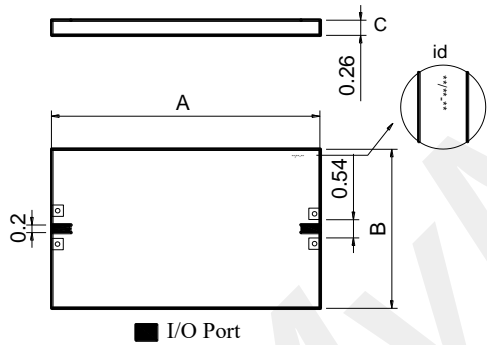
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

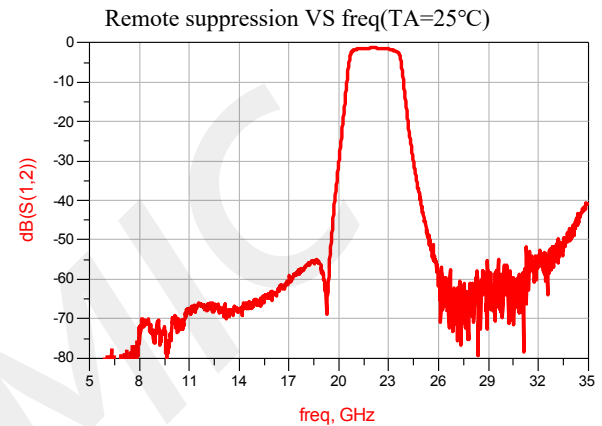
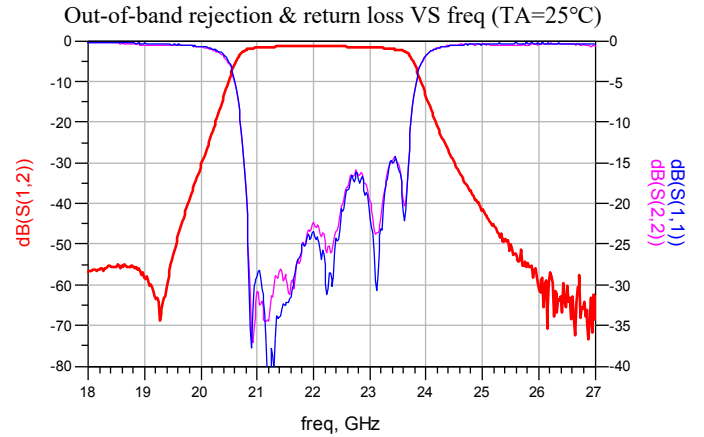
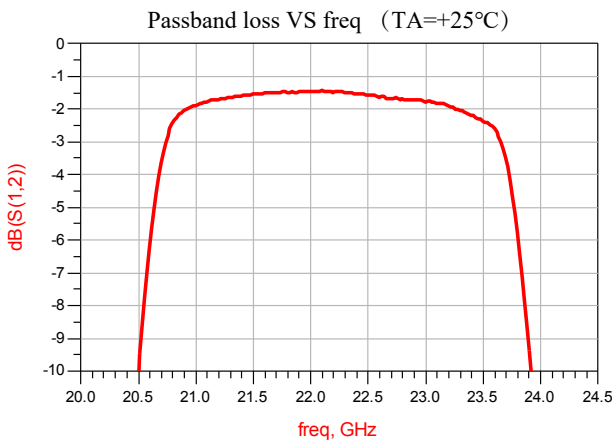
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	22.2	-	GHz
Passband freq range	20.9	-	23.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@19.6GHz		-	dB
	≥40@25.4GHz		-	dB

Dimensions

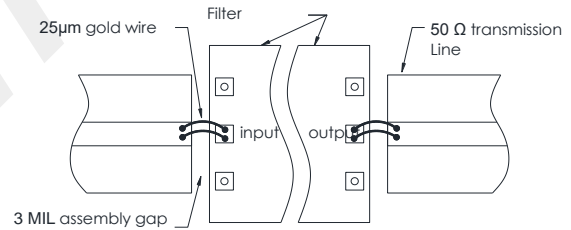


Size symbol	Value(mm)		
	Min	Nominal	Max
A	9.9	-	10
B	3.4	-	3.5

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

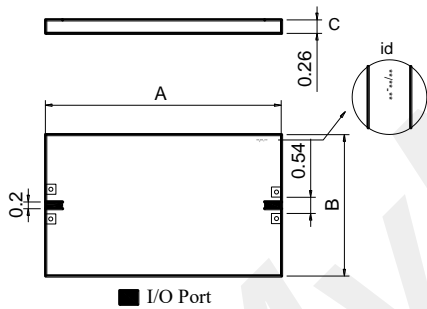
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

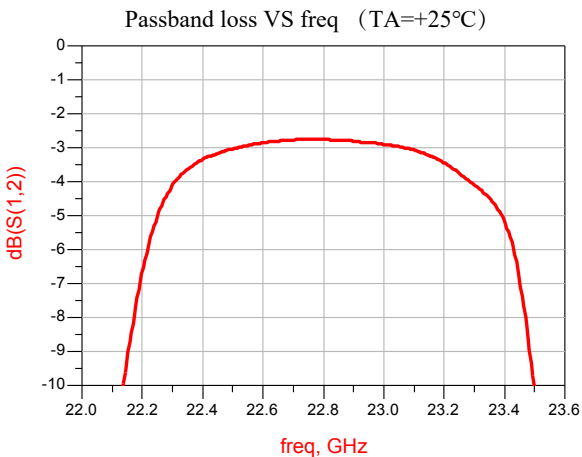
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	22.8	-	GHz
Passband freq range	22.5	-	23.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss		3.5	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@21.4GHz			dB
	≥40@24.2GHz			dB

Dimensions

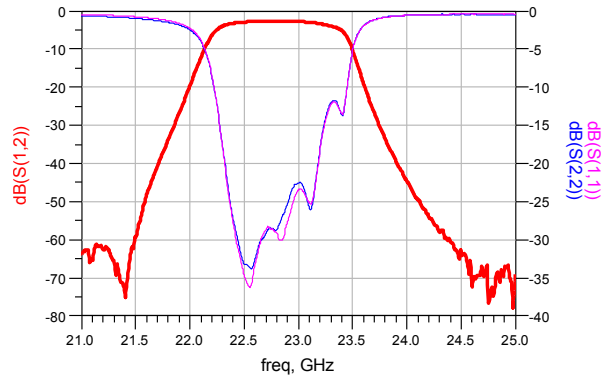


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.9	-	11
B	3.4	-	3.5

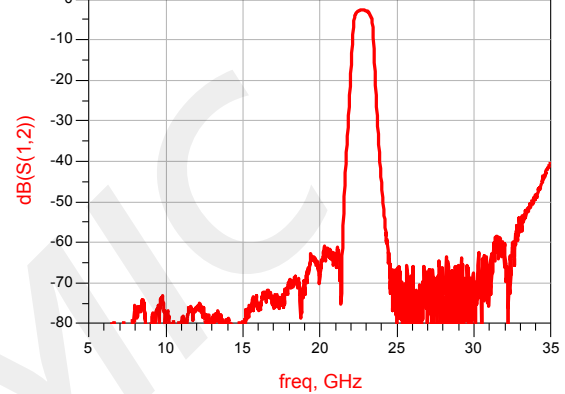
Typical test curve



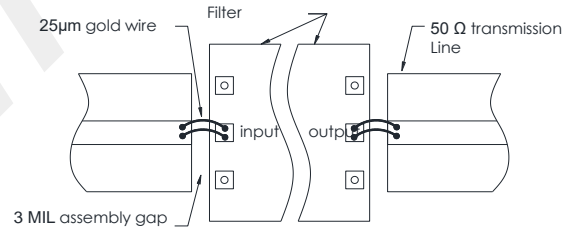
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

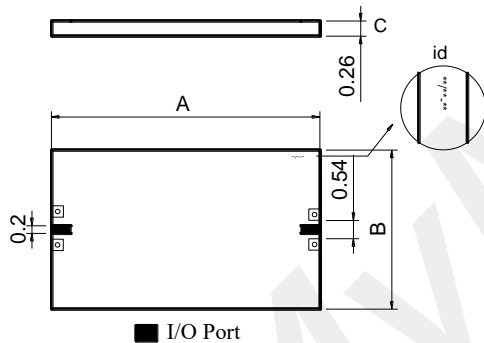
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification (T_A=+25°C)

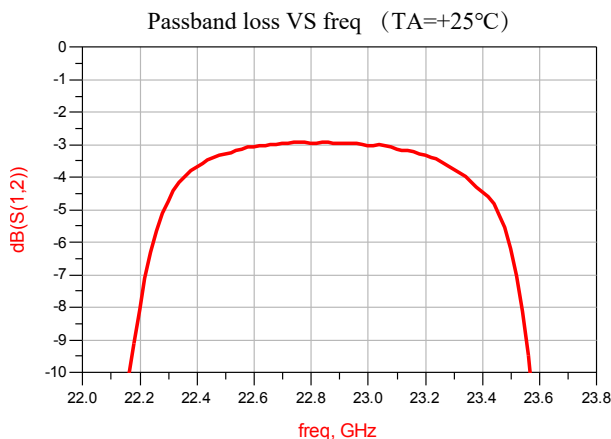
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	22.85	-	GHz
Passband freq range	22.5	-	23.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.5	-	dB
Return loss	-	22	-	dB
Out-of-band atten	≥40@21.5GHz			dB
	≥40@24.3GHz			dB

Dimensions

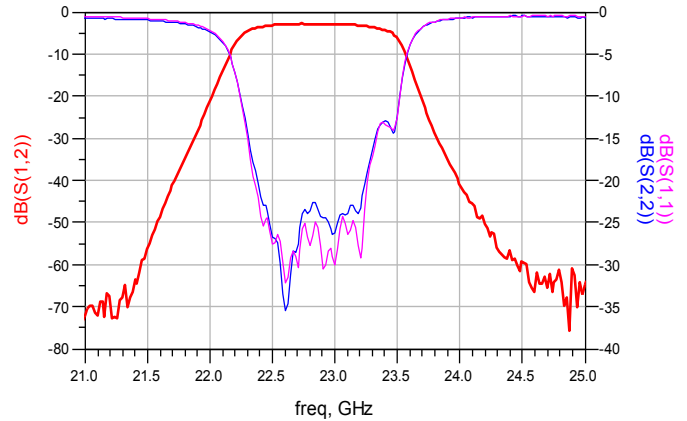


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.9	-	11
B	3.4	-	3.5

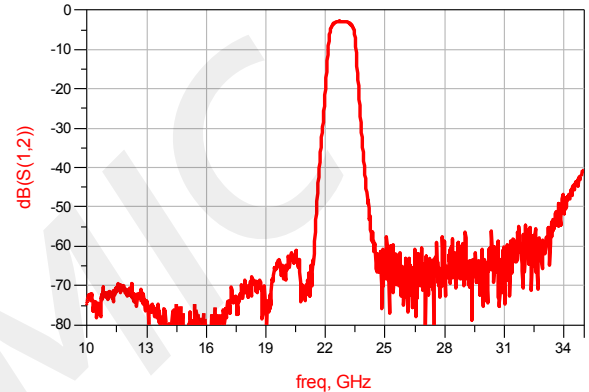
Typical test curve



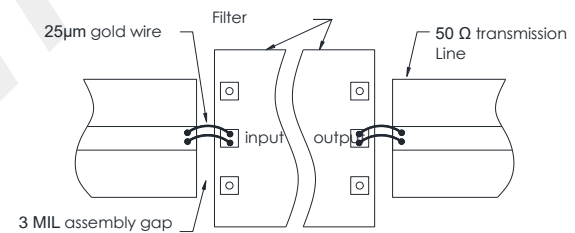
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq (TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

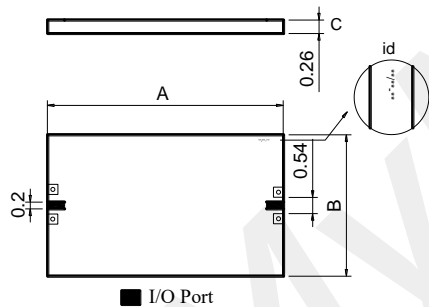
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

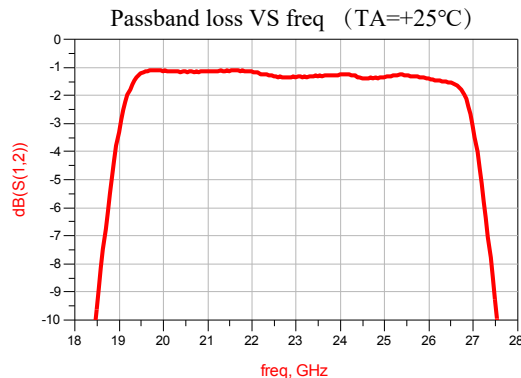
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	23.0	-	GHz
Passband freq range	19.3	-	26.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@14.5GHz		-	dB
	≥40@32.5GHz		-	dB

Dimensions

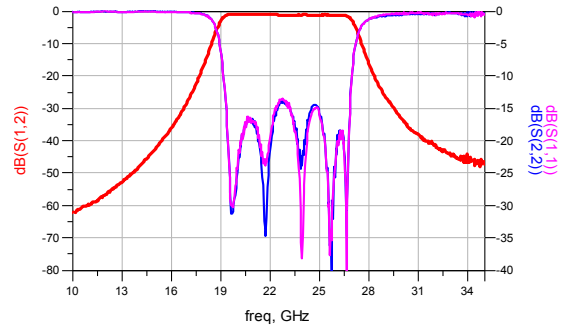


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.4	-	4.5
B	2.4	-	2.5

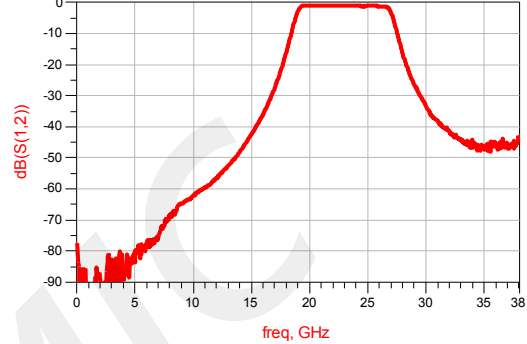
Typical test curve



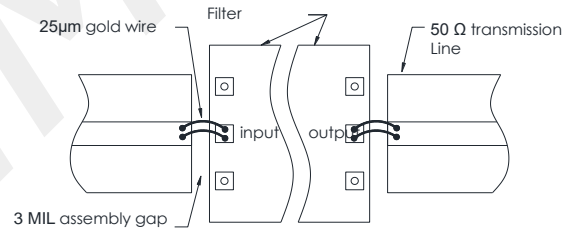
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

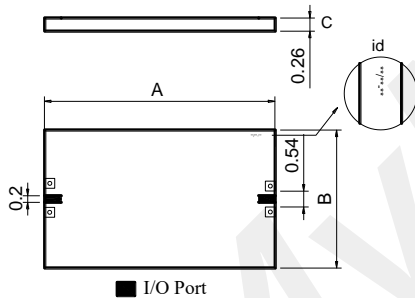
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

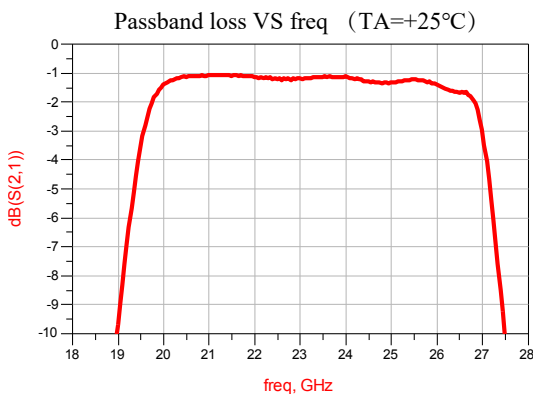
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	23.25	-	GHz
Passband freq range	19.8	-	26.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	$\geq 40@15\text{GHz}$			dB
	$\geq 40@32\text{GHz}$			dB

Dimensions

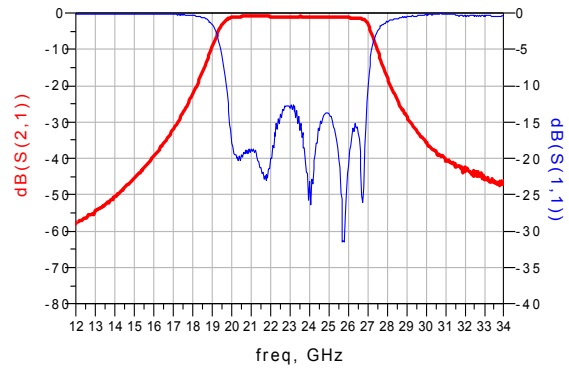


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.4	-	4.5
B	2.4	-	2.5

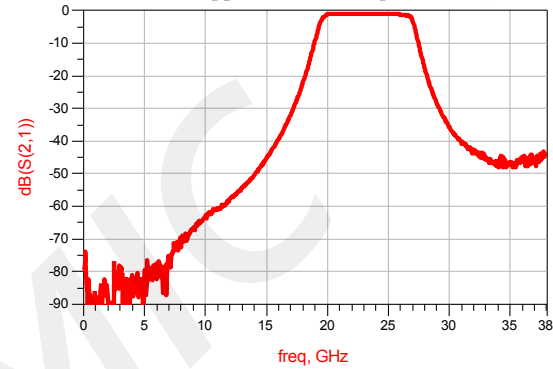
Typical test curve



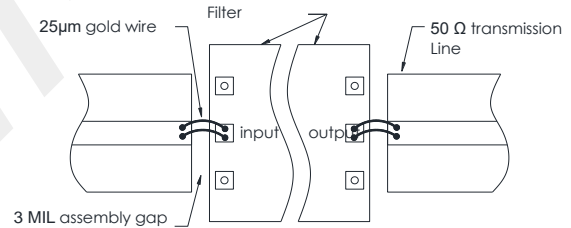
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness $\geq 0.2\text{mm}$.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

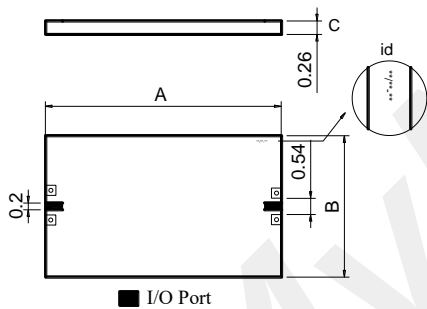
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

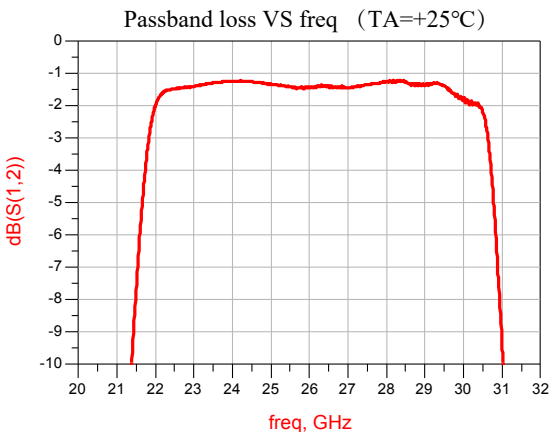
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	25.7	-	GHz
Passband freq range	22.2	-	29.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@17.5GHz			dB
	≥40@34.5GHz			dB

Dimensions

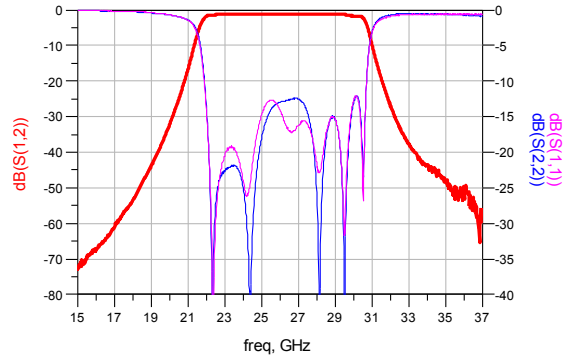


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	1.8	-	1.9

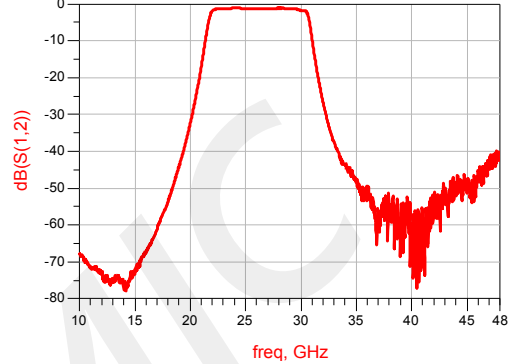
Typical test curve



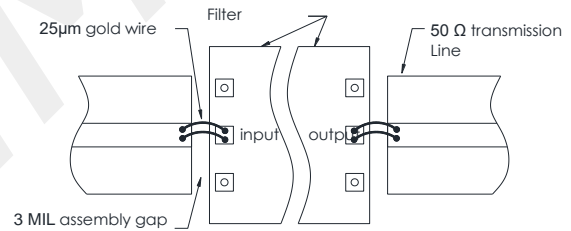
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

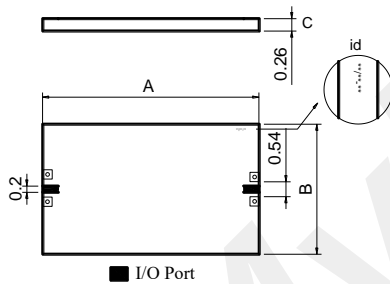
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

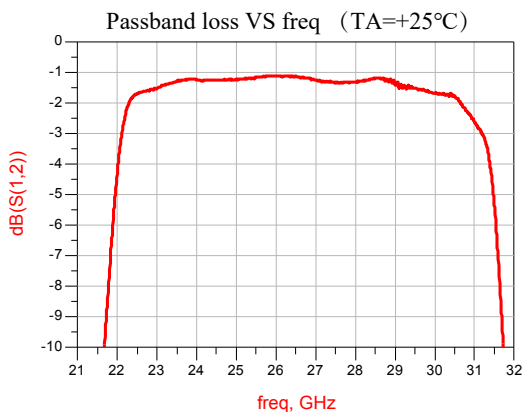
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	26.5	-	GHz
Passband freq range	22.5	-	30.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@19.5GHz			dB
	≥40@33.6GHz			dB

Dimensions

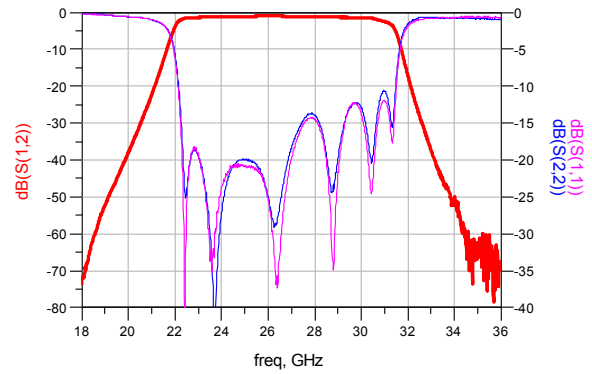


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.4	-	10.5
B	1.9	-	2

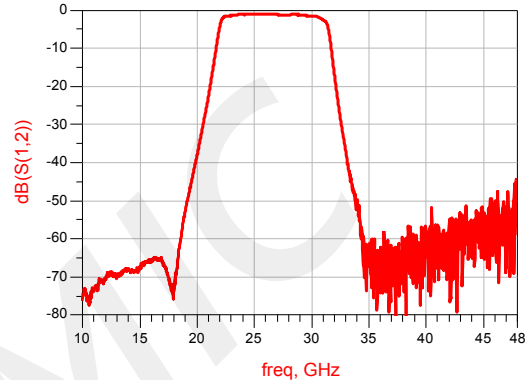
Typical test curve



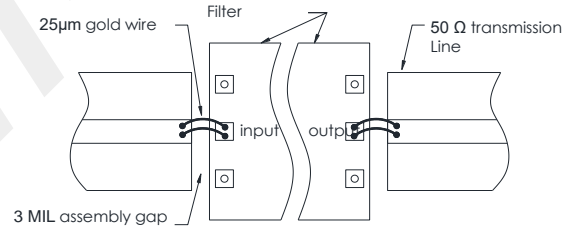
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

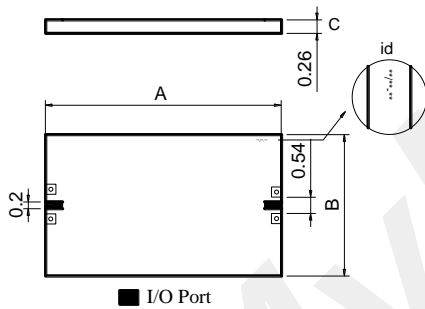
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

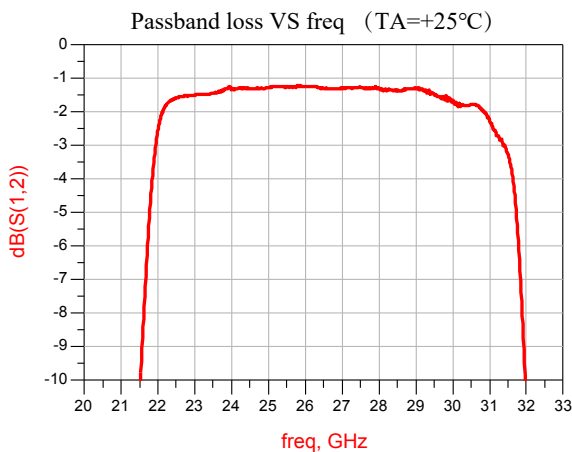
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	26.5	-	GHz
Passband freq range	22.4	-	30.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@19.0GHz			dB
	≥40@34GHz			dB

Dimensions

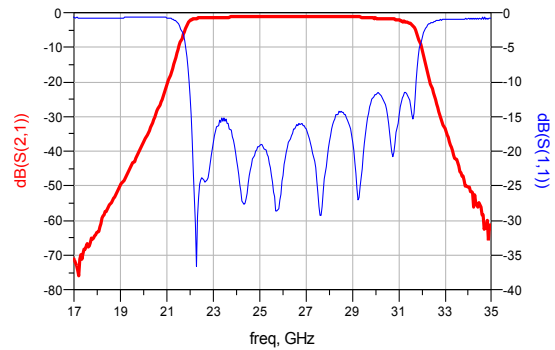


Size symbol	Value(mm)		
	Min	Nominal	Max
A	13.9	-	14
B	1.9	-	2

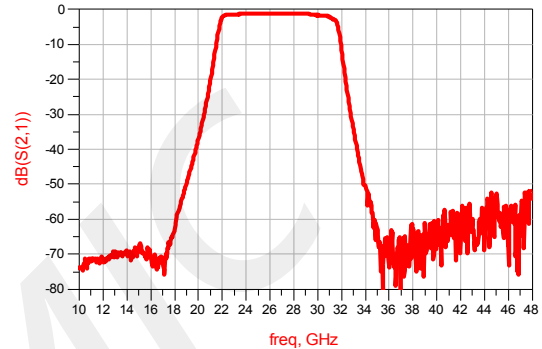
Typical test curve



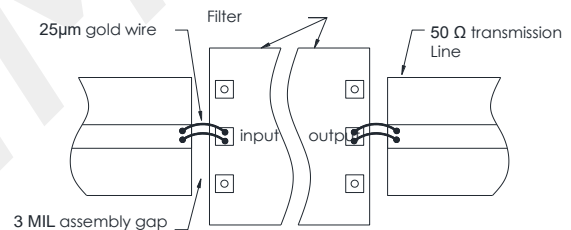
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

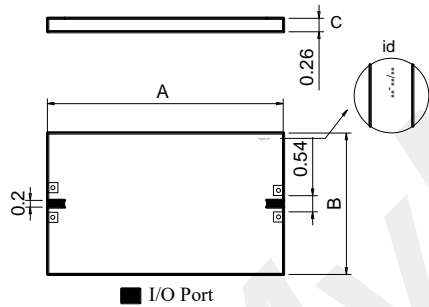
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

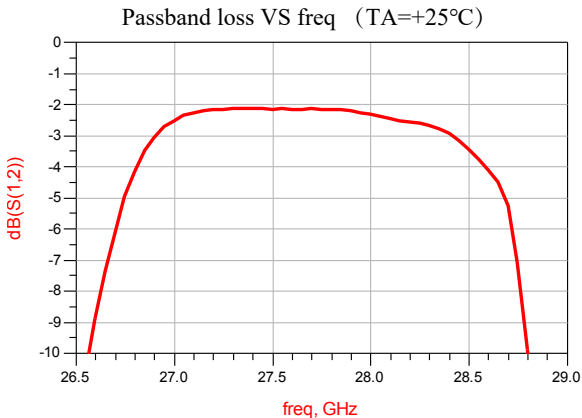
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	27.65	-	GHz
Passband freq range	26.9	-	28.1	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@25.0GHz			dB
	≥40@29.6GHz			dB

Dimensions

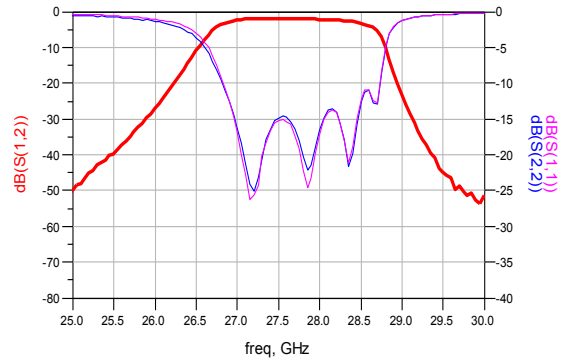


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9		8
B	2.9		3

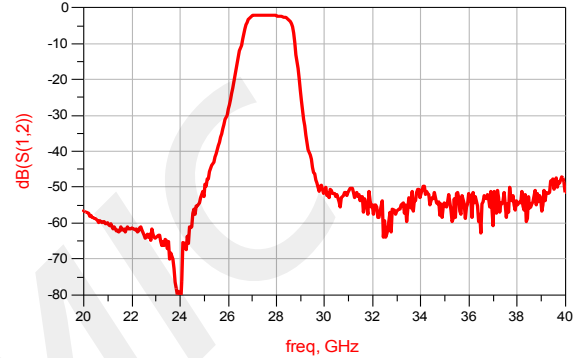
Typical test curve



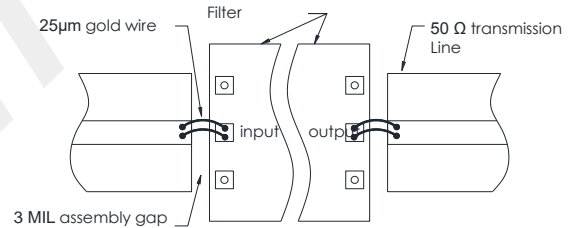
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

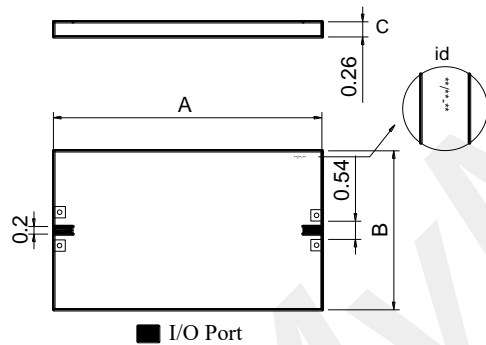
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

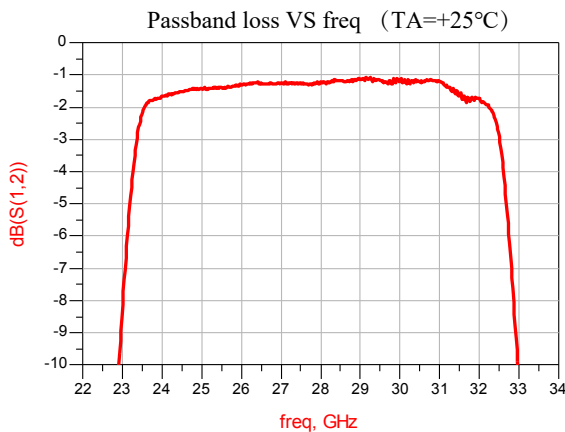
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	27.9	-	GHz
Passband freq range	23.6	-	32.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@19GHz		-	dB
	≥40@37.0GHz		-	dB

Dimensions

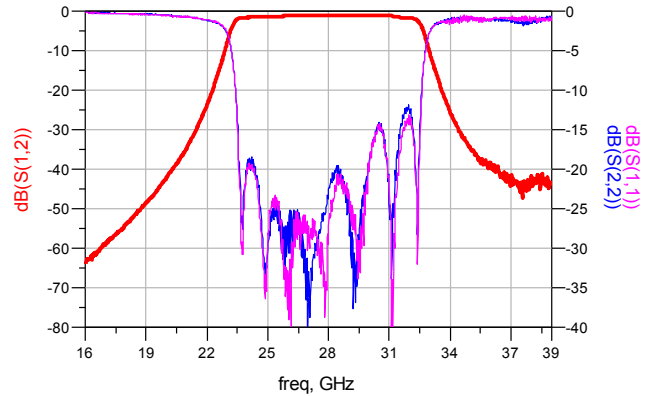


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9	-	6
B	2.4	-	2.5

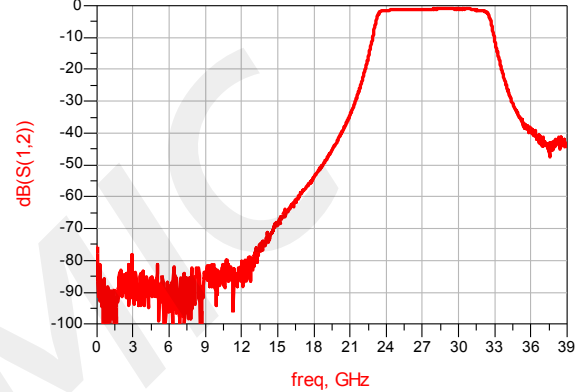
Typical test curve



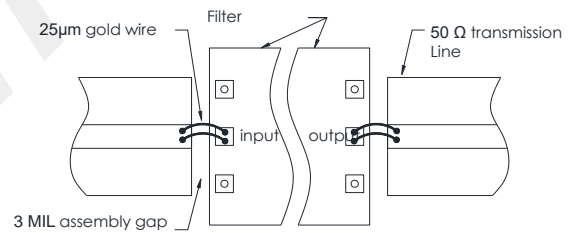
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

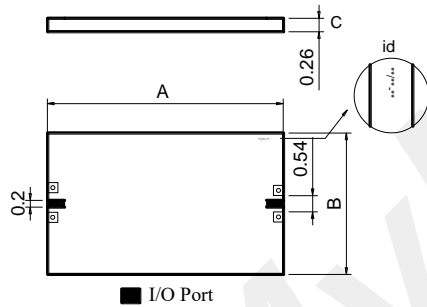
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

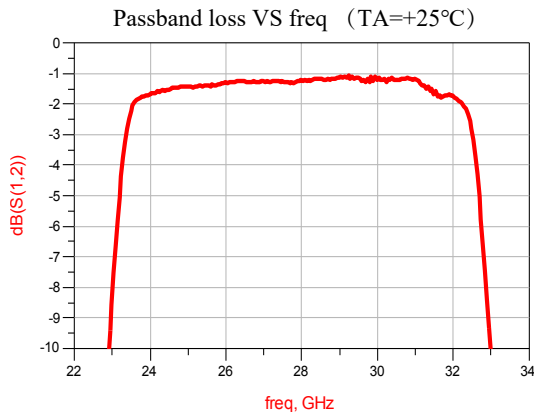
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	28	-	GHz
Passband freq range	24.1	-	32	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥ 40 @19.5GHz			dB
	≥ 40 @37GHz			dB

Dimensions

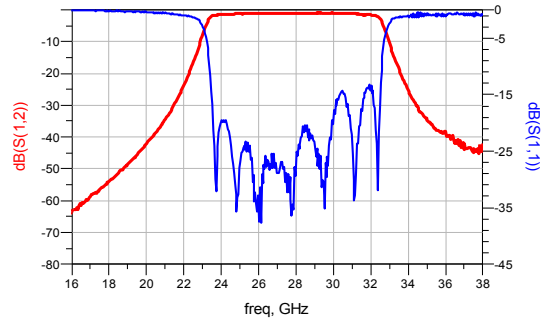


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.9		6
B	2.4		2.5

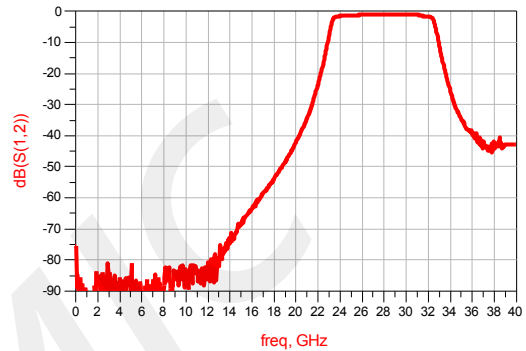
Typical test curve



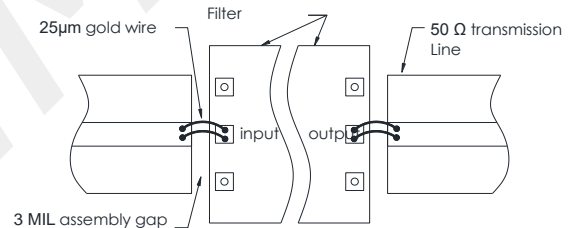
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2 mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

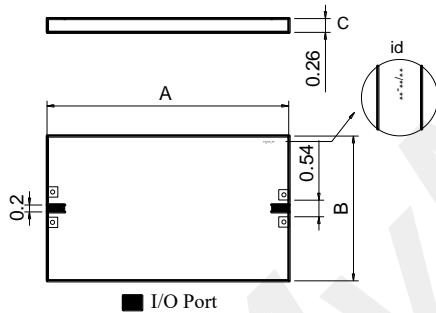
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

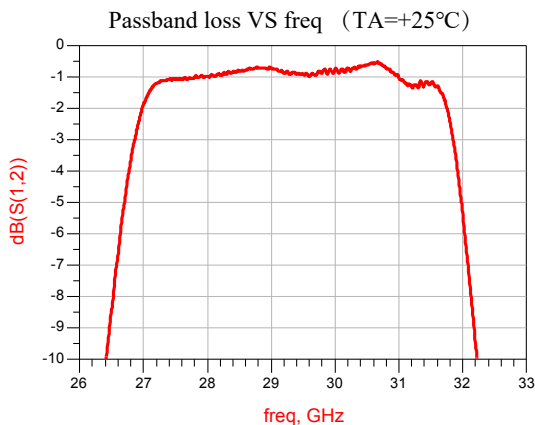
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	29.2	-	GHz
Passband freq range	27.2	-	31.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@24.5GHz		-	dB
	≥40@34.9GHz		-	dB

Dimensions

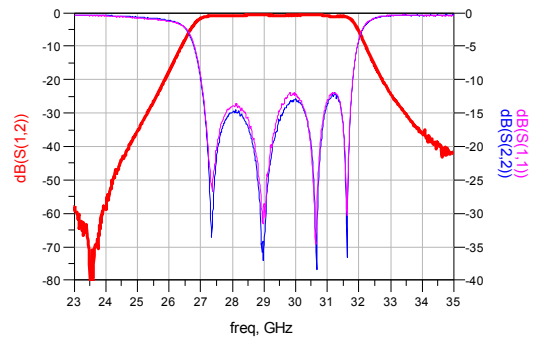


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	2.9	-	3.0

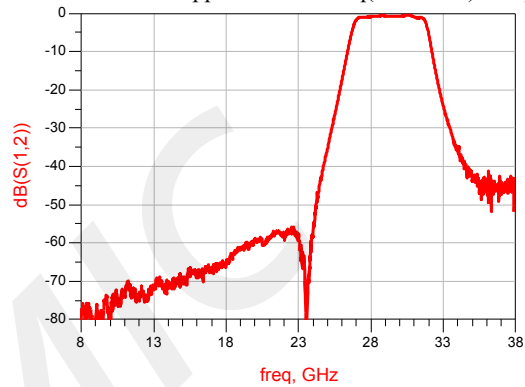
Typical test curve



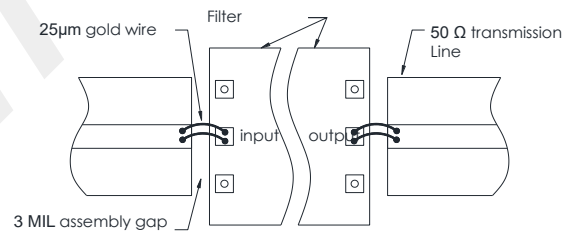
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

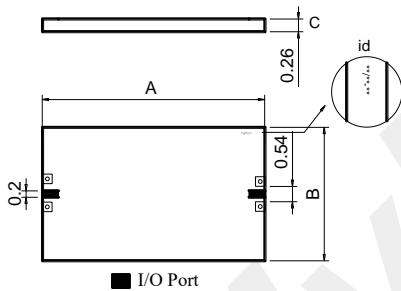
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

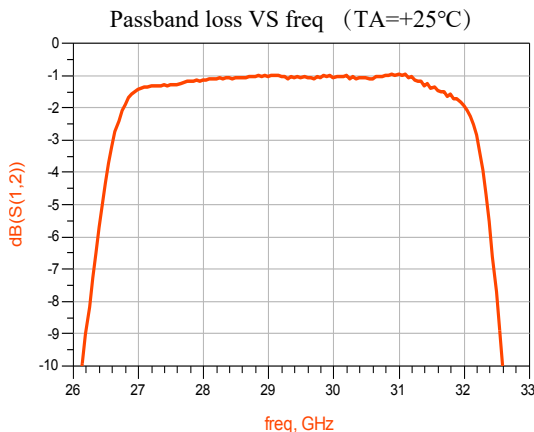
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	29.35	-	GHz
Passband freq range	26.8	-	31.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss		1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@24 GHz			dB
	≥40@34.5GHz			dB

Dimensions

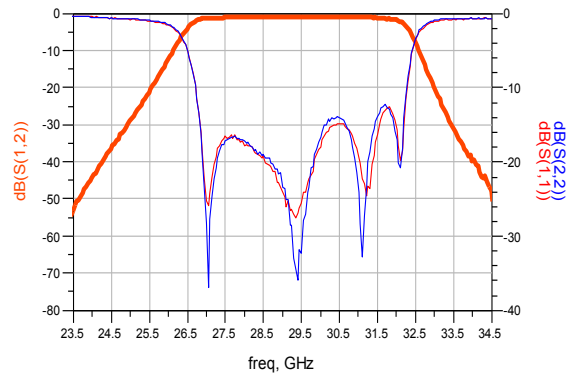


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	1.9	-	2

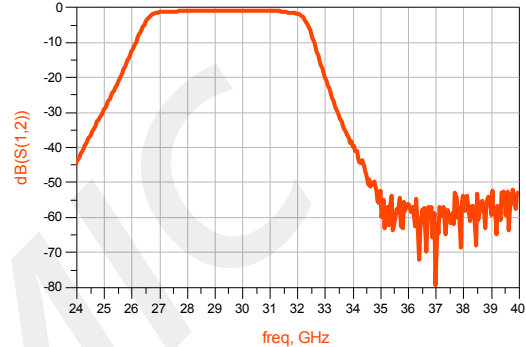
Typical test curve



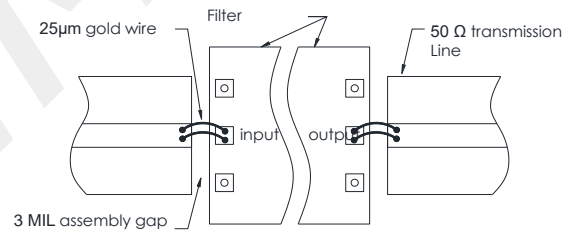
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

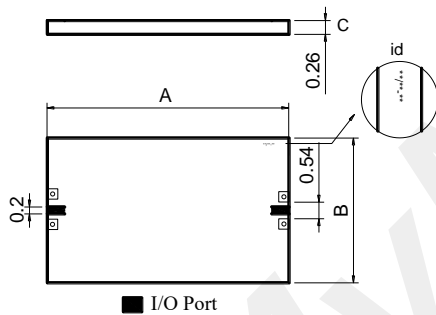
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

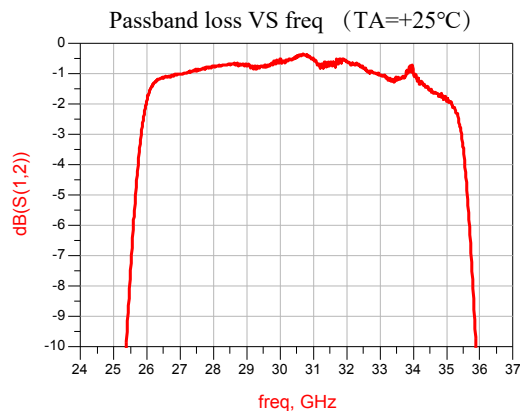
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	30.3	-	GHz
Passband freq range	26.7	-	34.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@23.4GHz		-	dB
	≥30@37.3GHz		-	dB

Dimensions

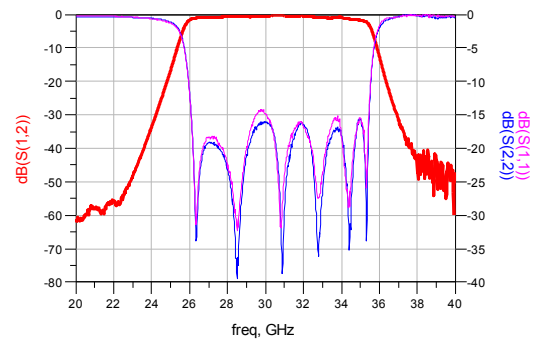


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	1.9	-	2.0

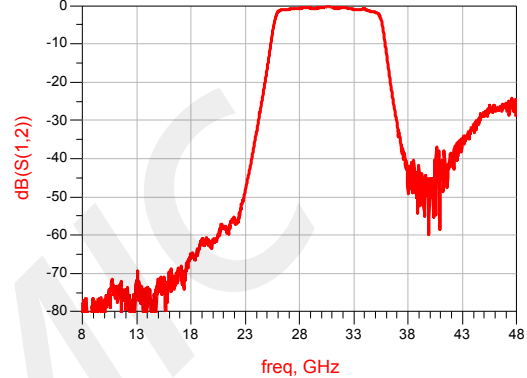
Typical test curve



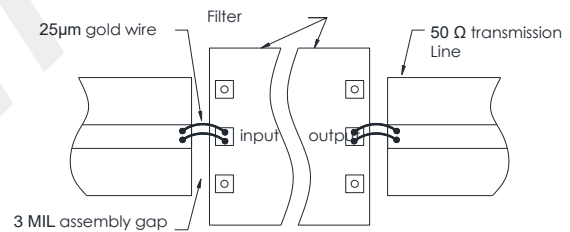
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

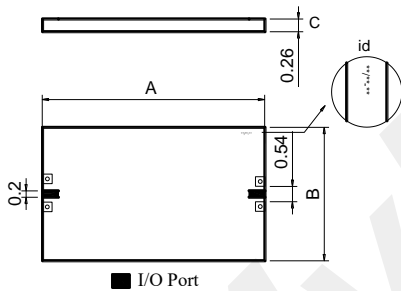
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

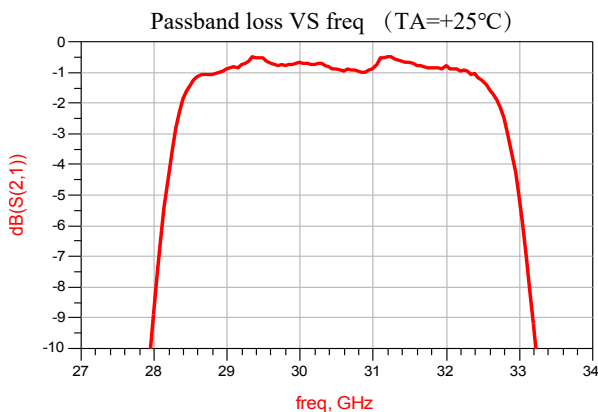
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	30.5	-	GHz
Passband freq range	28.75	-	32.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@26.0GHz			dB
	≥40@35.5GHz			dB

Dimensions

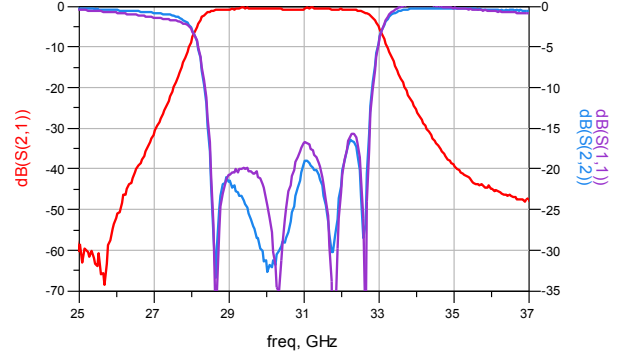


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	2.9	-	3

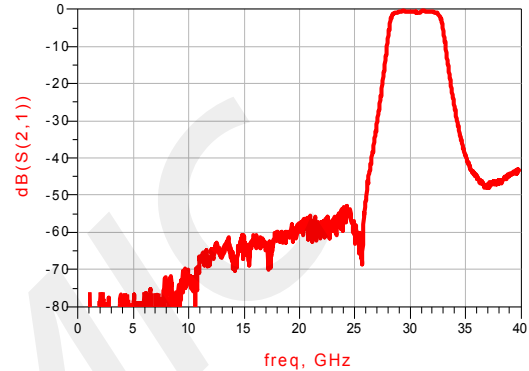
Typical test curve



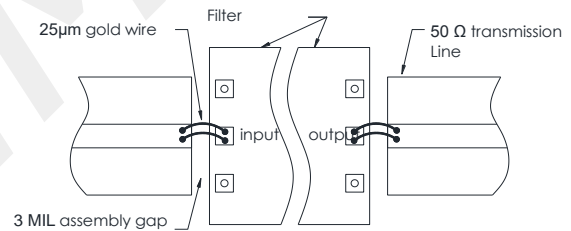
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

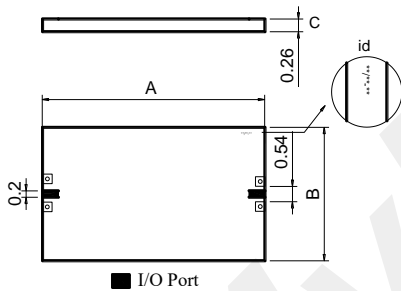
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

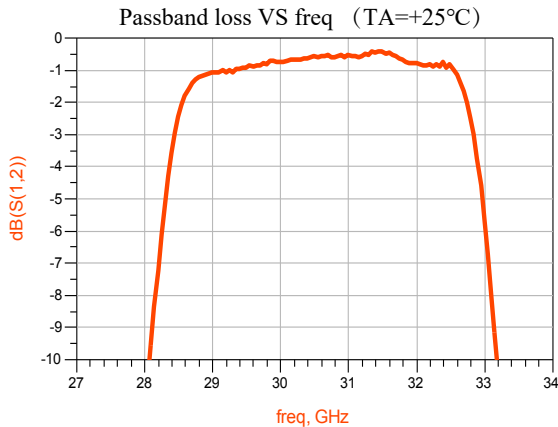
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	30.7	-	GHz
Passband freq range	28.8	-	32.6	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	14	-	dB
Out-of-band atten	≥40@26.0GHz			dB
	≥40@35.5GHz			dB

Dimensions

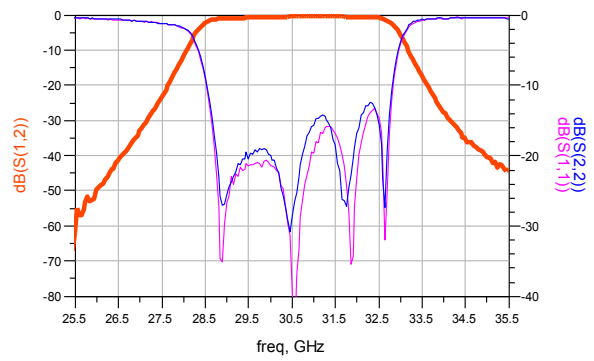


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	2.9	-	3

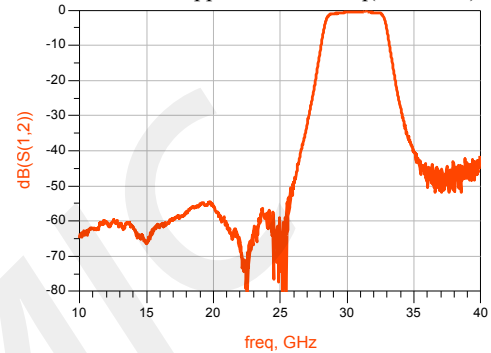
Typical test curve



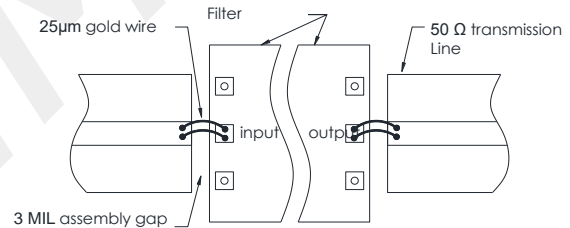
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

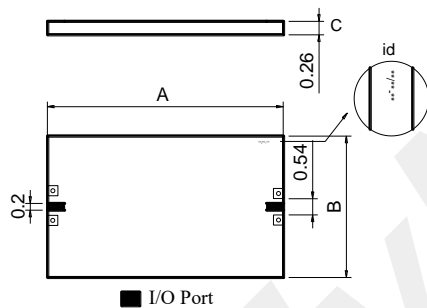
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

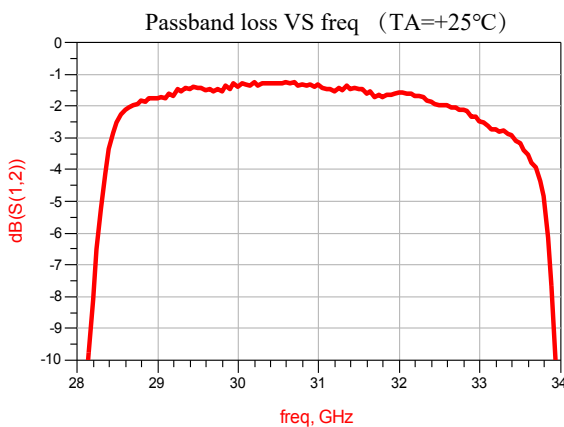
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	30.7	-	GHz
Passband freq range	28.6	-	32.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@26.5GHz		-	dB
	≥40@34.8GHz		-	dB

Dimensions

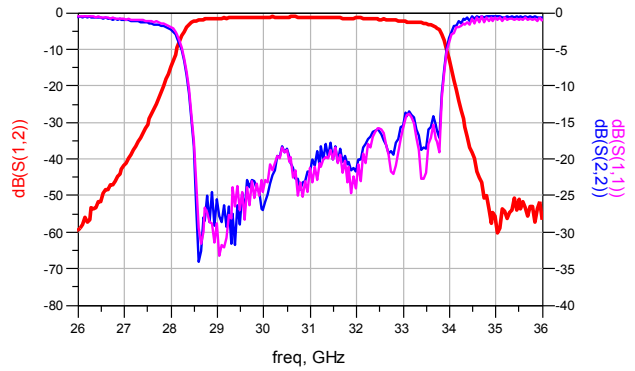


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.5	-	2.6

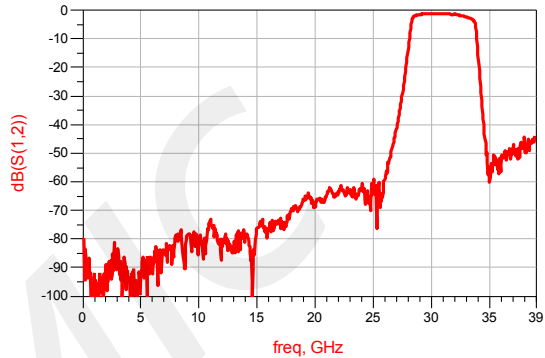
Typical test curve



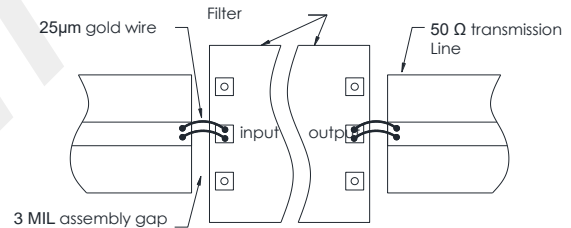
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

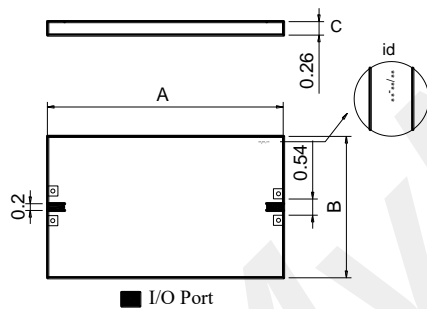
- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

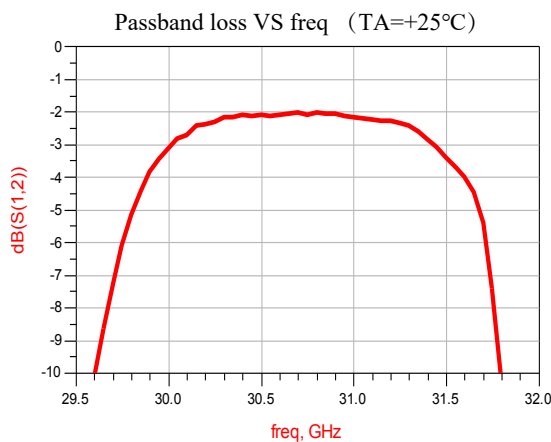
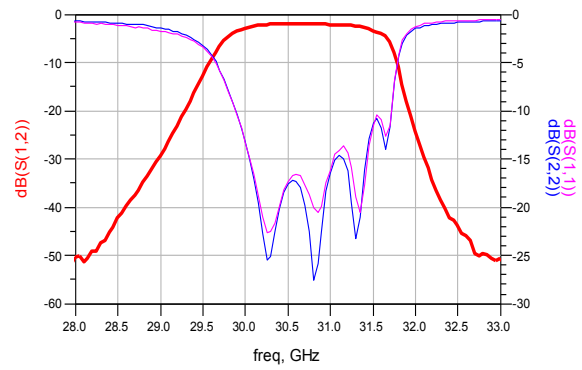
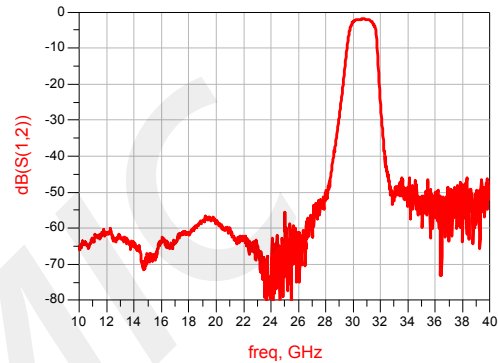
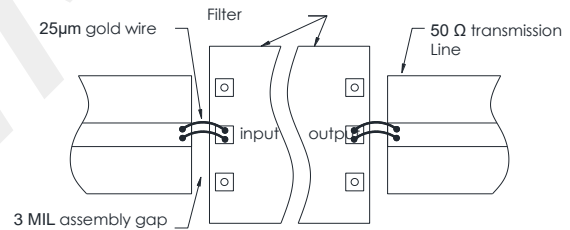
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	30.75	-	GHz
Passband freq range	30.1	-	31.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	$\geq 40@28.3\text{GHz}$		-	dB
	$\geq 40@32.6\text{GHz}$		-	dB

Dimensions


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	2.9	-	3

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness $\geq 0.2\text{mm}$.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

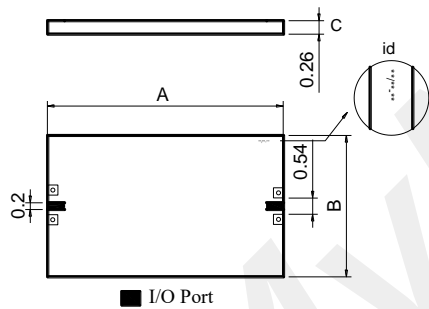
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

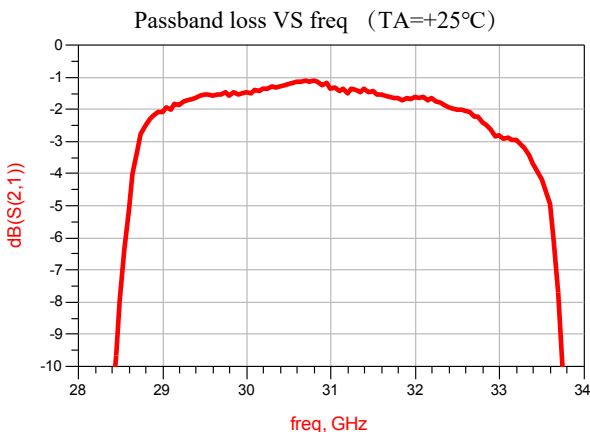
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	30.8	-	GHz
Passband freq range	29.3	-	32.3	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@27GHz			dB
	≥40@34.6GHz			dB

Dimensions

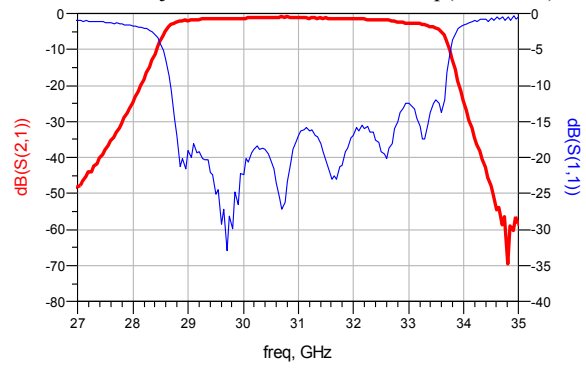


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.9	-	9
B	2.5	-	2.6

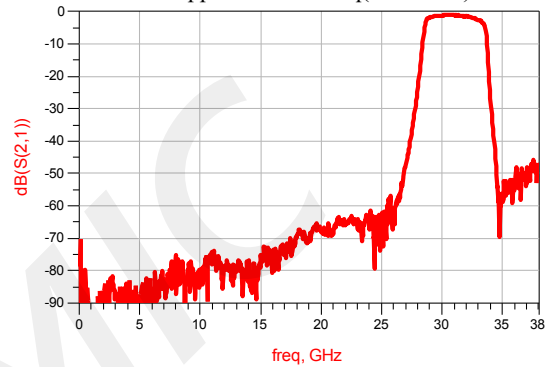
Typical test curve



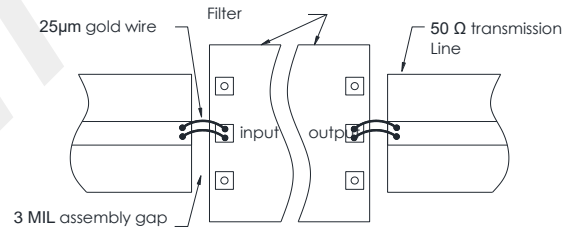
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

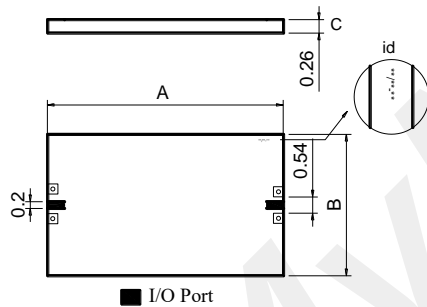
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

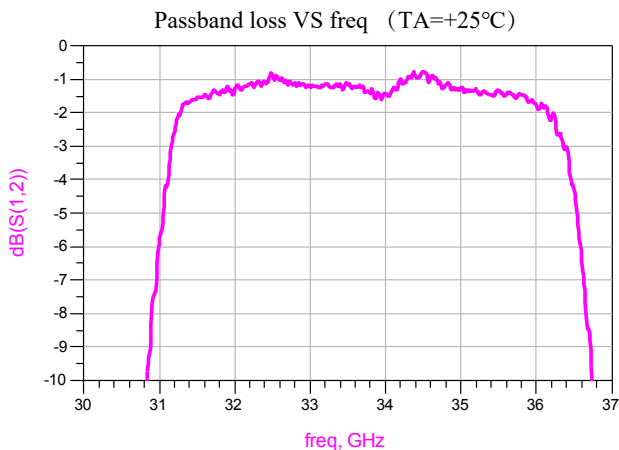
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	33.5	-	GHz
Passband freq range	31.8	-	35.8	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@29.5GHz			dB
	≥40@38.7GHz			dB

Dimensions

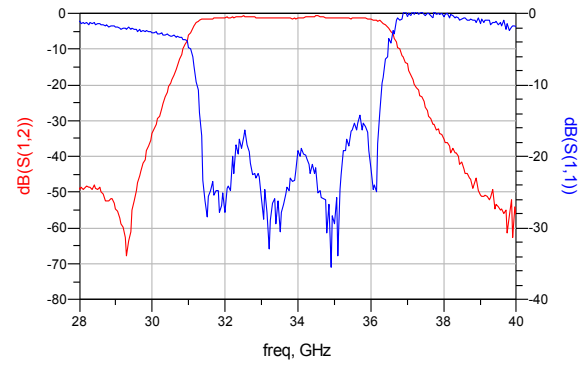


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	2.2	-	2.3

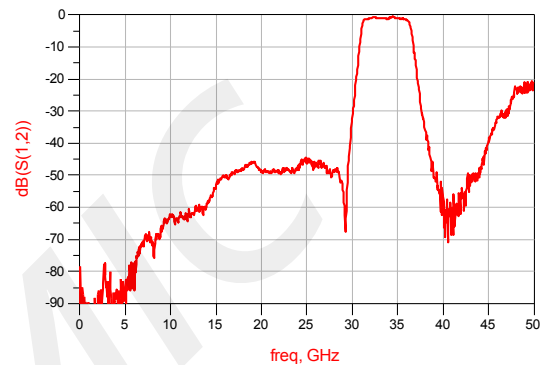
Typical test curve



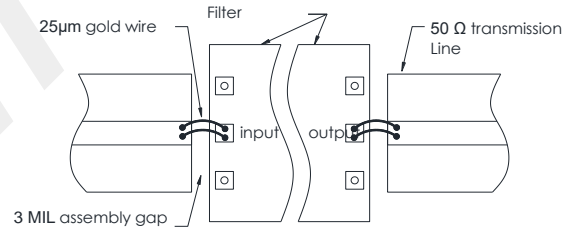
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip

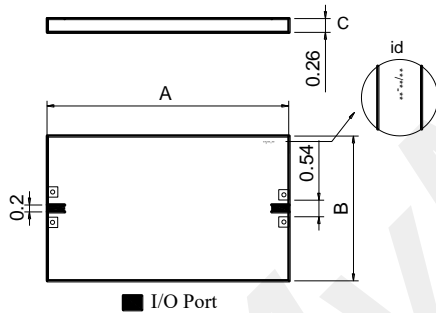
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

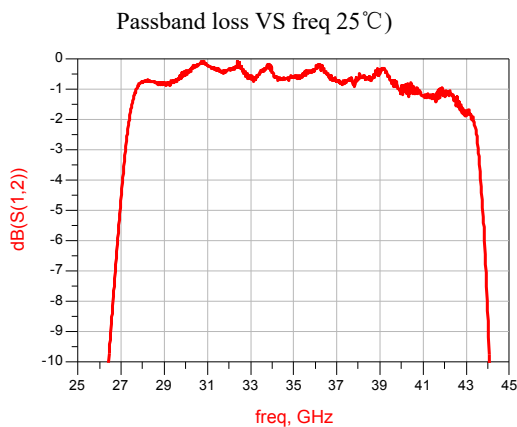
Items	Min	Typ	Max	unit
Center Freq(f ₀)	-	34	-	GHz
Passband freq range	28	-	40	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@22.2GHz		-	dB
	≥20@44.8GHz		-	dB

Dimensions

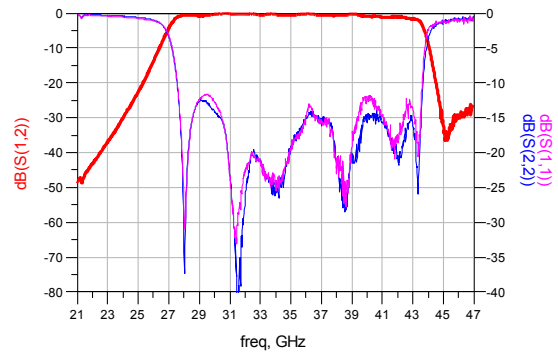


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	2.4	-	2.5

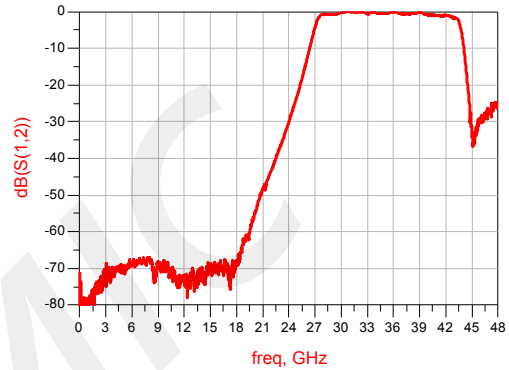
Typical test curve



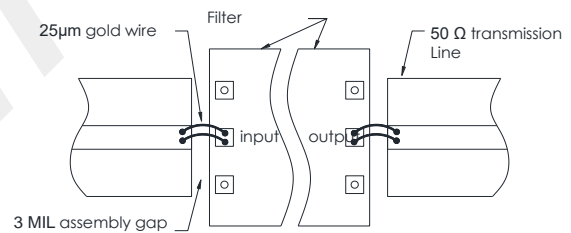
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

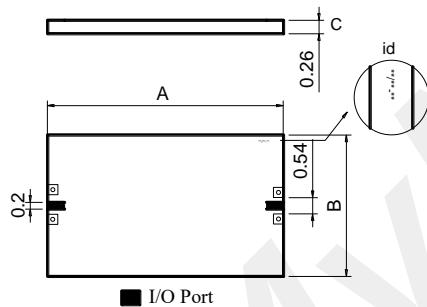
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

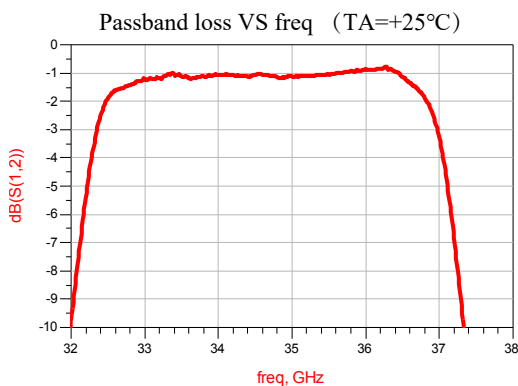
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	34.5	-	GHz
Passband freq range	32.8	-	36.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@29.6GHz			dB
	≥35@39.1GHz			dB

Dimensions

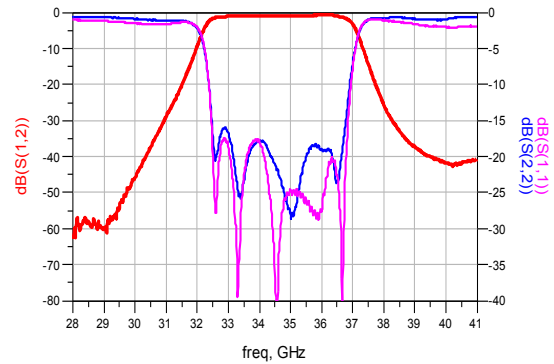


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	2.9	-	3

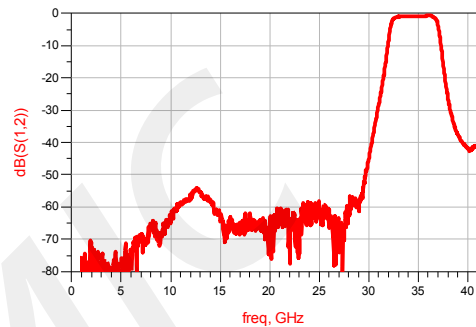
Typical test curve



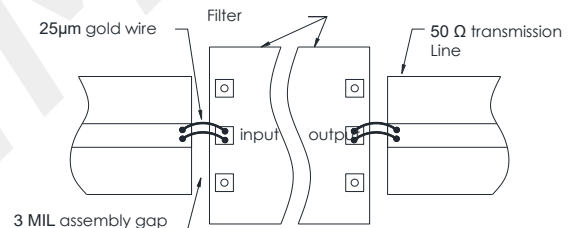
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

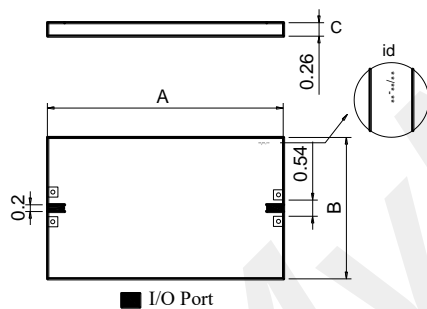
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

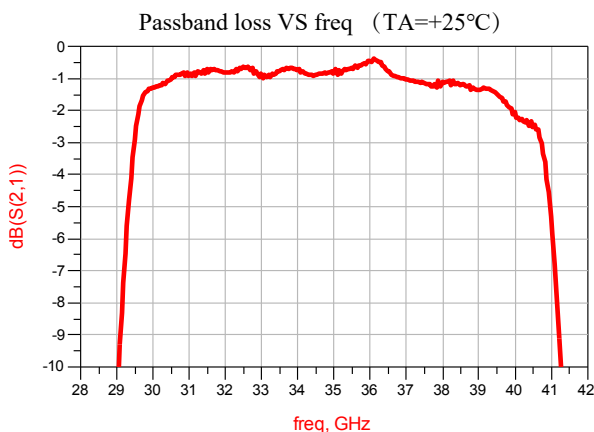
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	34.5	-	GHz
Passband freq range	30	-	39	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@27GHz			dB
	≥40@44GHz			dB

Dimensions

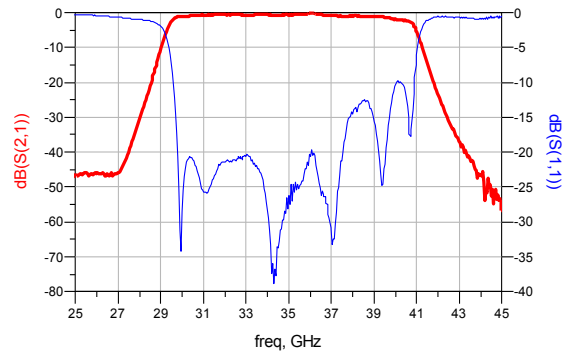


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	1.8	-	1.9

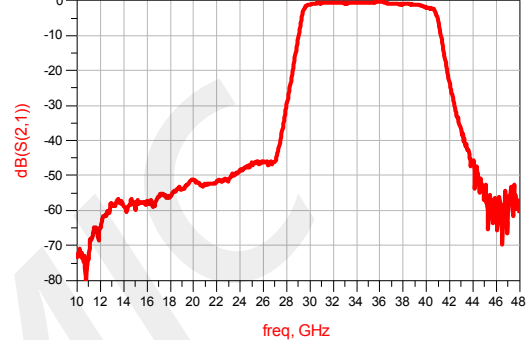
Typical test curve



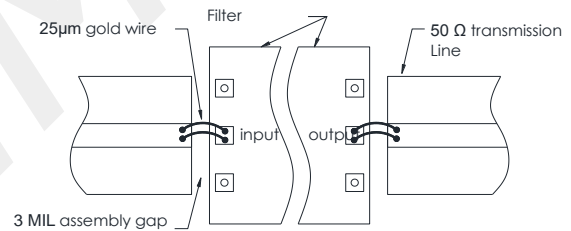
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

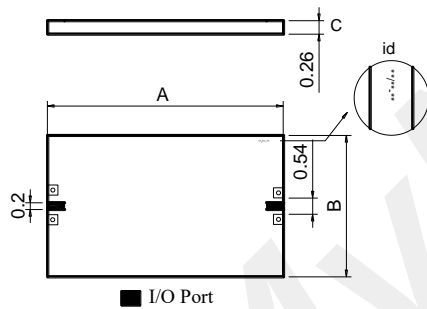
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

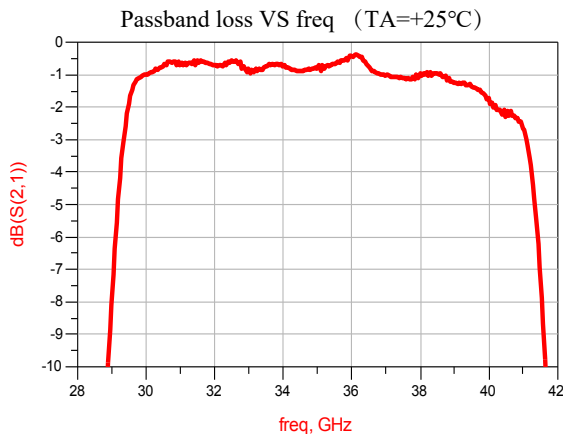
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	34.55	-	GHz
Passband freq range	29.7	-	39.4	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@26.5GHz			dB
	≥40@44.5GHz			dB

Dimensions

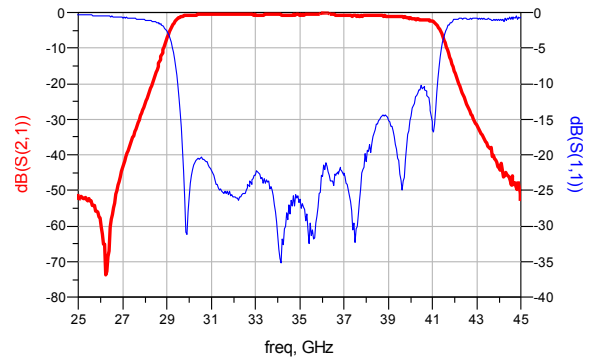


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8
B	1.8	-	1.9

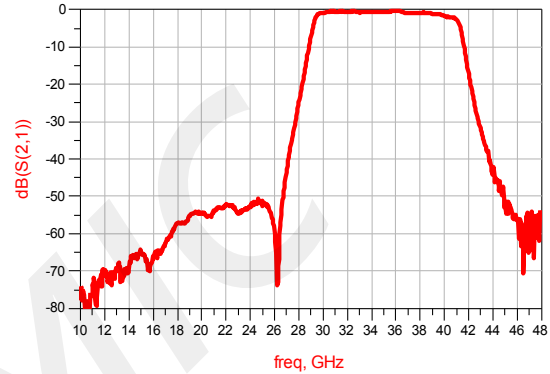
Typical test curve



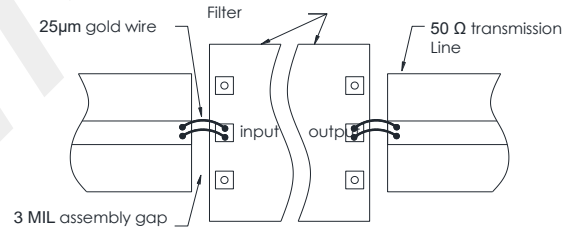
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

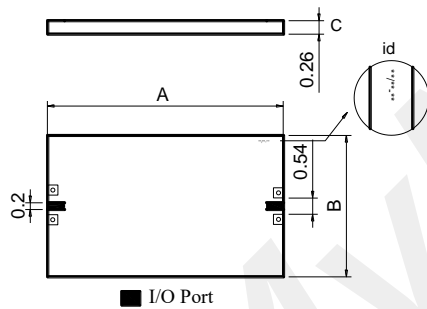
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

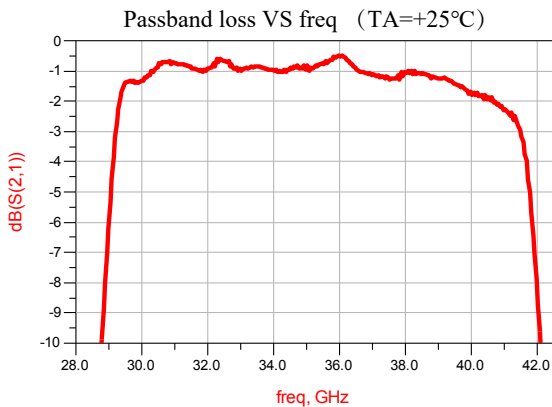
Items	Min	Typ	Max	Unit
Center Freq(f_0)	-	34.6	-	GHz
Passband freq range	29.5	-	39.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@26.2GHz			dB
	≥40@44.5GHz			dB

Dimensions

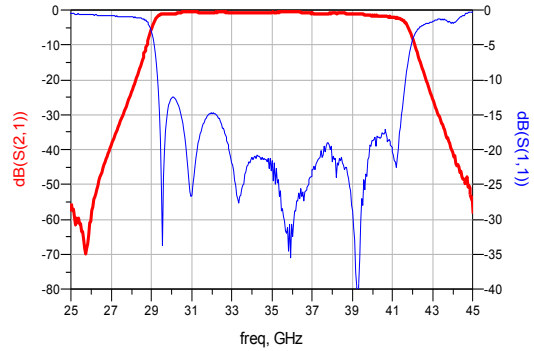


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	1.9	-	2

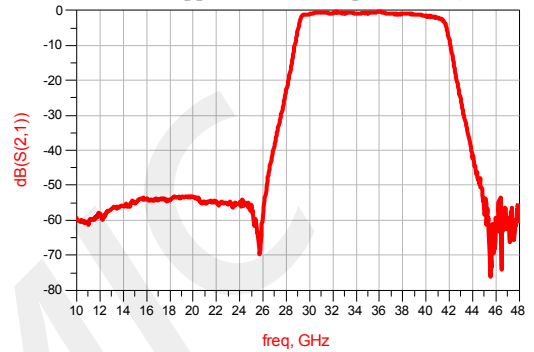
Typical test curve



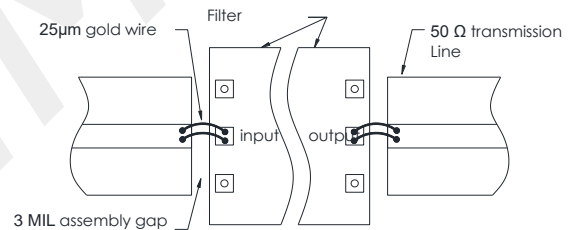
Out-of-band rejection & return loss VS freq (TA=25°C)25°C



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

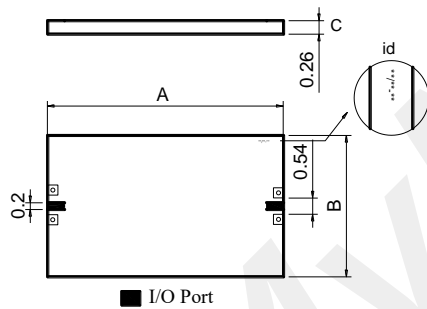
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

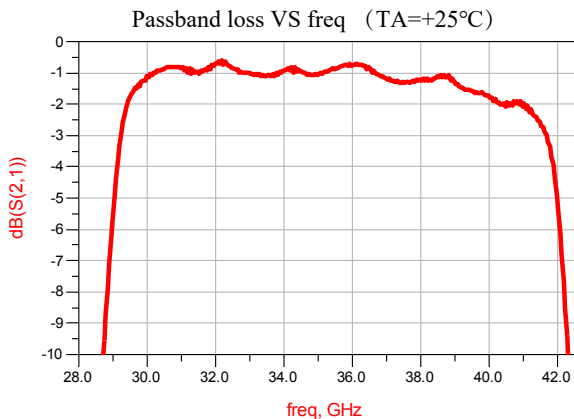
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	34.7	-	GHz
Passband freq range	29.7	-	39.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	1.5	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@26GHz		-	dB
	≥40@45GHz		-	dB

Dimensions

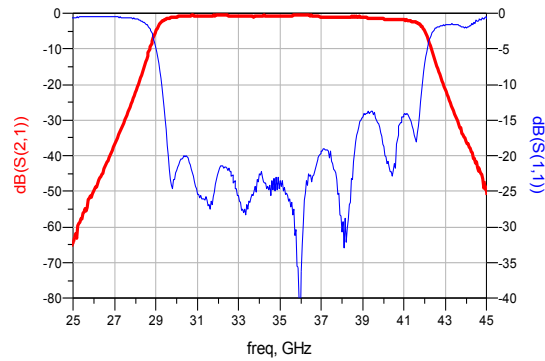


Size symbol	Value(mm)		
	Min	Nominal	Max
A	10.9	-	11
B	1.9	-	2

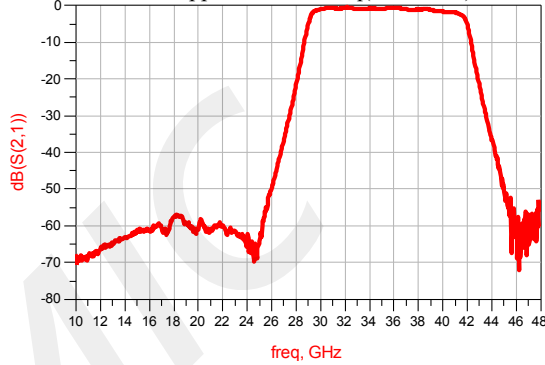
Typical test curve



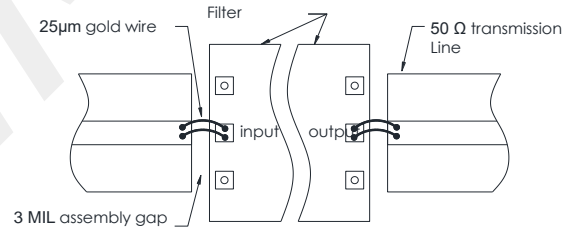
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

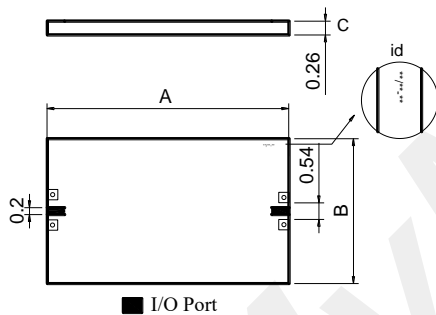
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

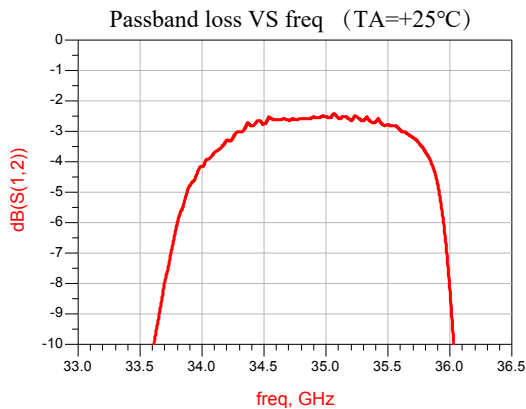
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	35	-	GHz
Passband freq range	34.55	-	35.7	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	3.0	-	dB
Return loss	-	15	-	dB
Out-of-band atten	≥40@32.0GHz		-	dB
	≥40@37.2GHz		-	dB

Dimensions

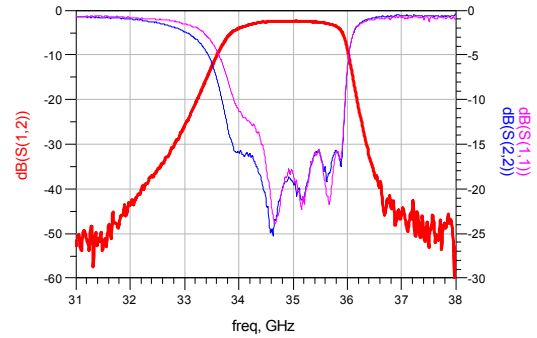


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	2.9	-	3.0

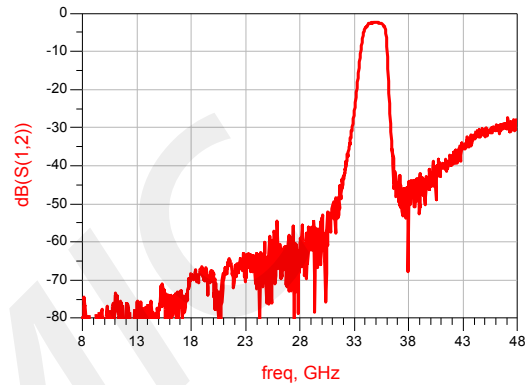
Typical test curve



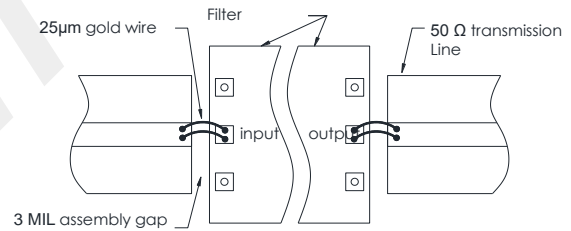
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

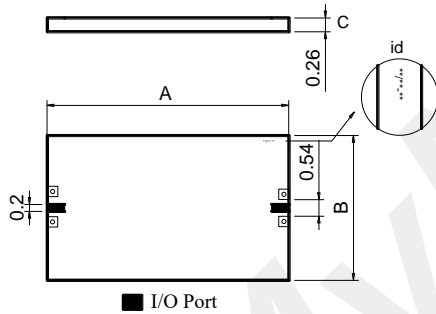
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

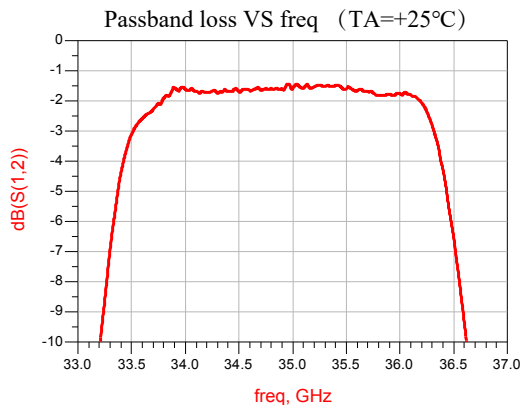
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	35	-	GHz
Passband freq range	33.8	-	36.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	13	-	dB
Out-of-band atten	≥40@32.0GHz		-	dB
	≥30@39.0GHz		-	dB

Dimensions

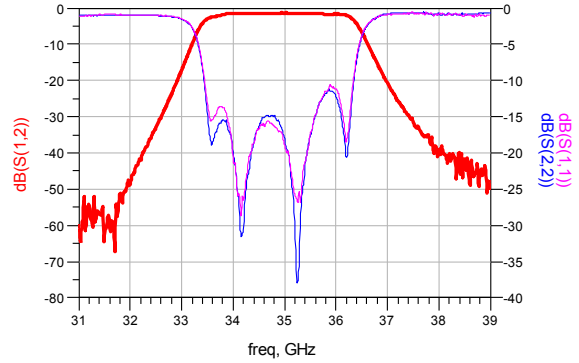


Size symbol	Value(mm)		
	Min	Nominal	Max
A	8.4	-	8.5
B	2.9	-	3.0

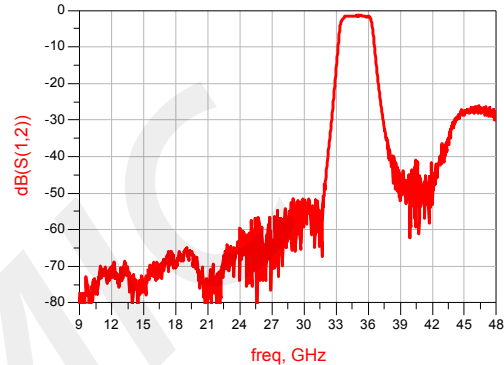
Typical test curve



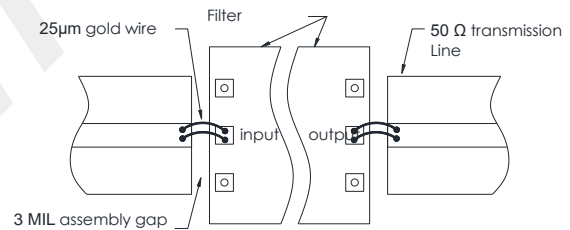
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip

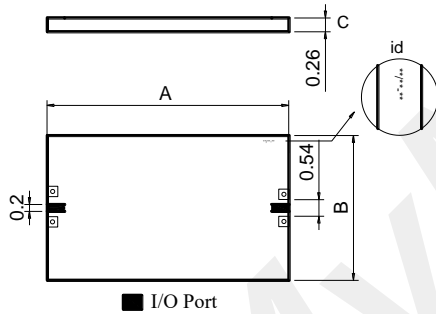
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

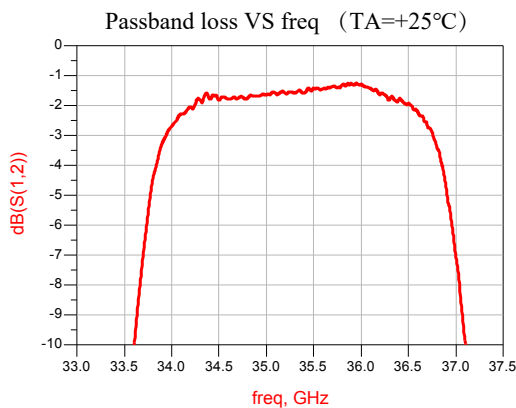
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	35.4	-	GHz
Passband freq range	34.3	-	36.5	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	17	-	dB
Out-of-band atten	≥40@32.4GHz		-	dB
	≥30@38.5GHz		-	dB

Dimensions

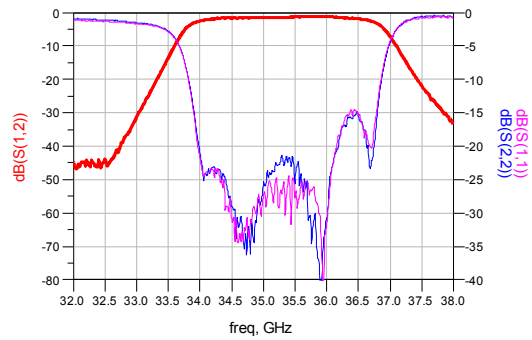


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.9	-	8.0
B	2.7	-	2.8

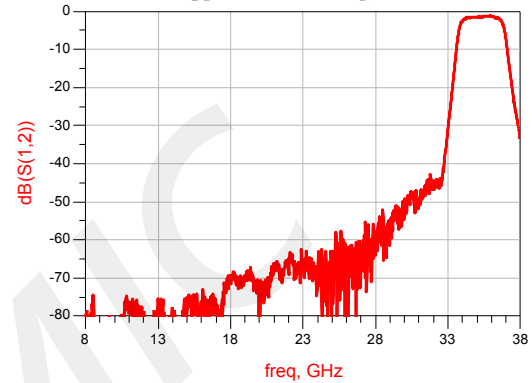
Typical test curve



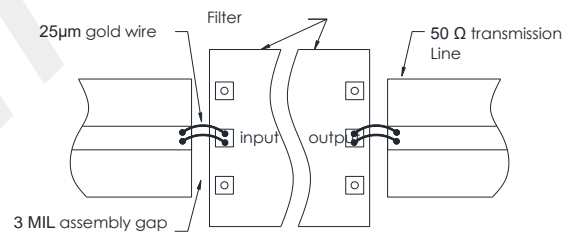
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip

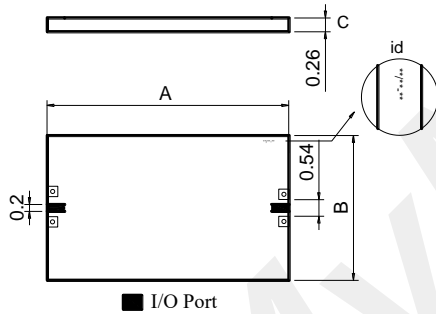
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(TA=+25°C)

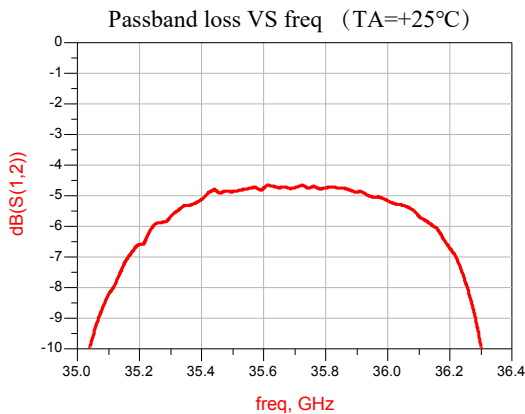
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	35.7	-	GHz
Passband freq range	35.4	-	36.0	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	5.0	-	dB
Return loss	-	20	-	dB
Out-of-band atten	≥40@34.2GHz		-	dB
	≥40@37.0GHz		-	dB

Dimensions

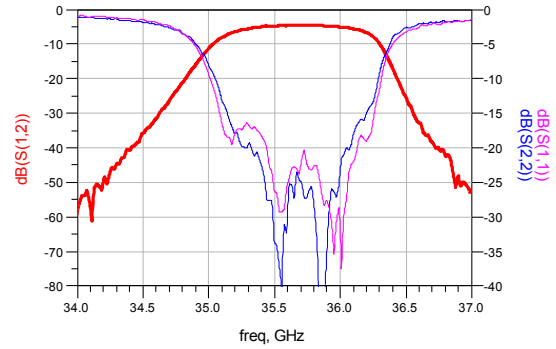


Size symbol	Value(mm)		
	Min	Nominal	Max
A	9.4	-	9.5
B	2.9	-	3.0

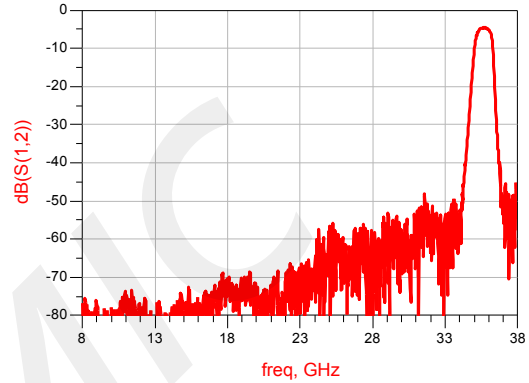
Typical test curve



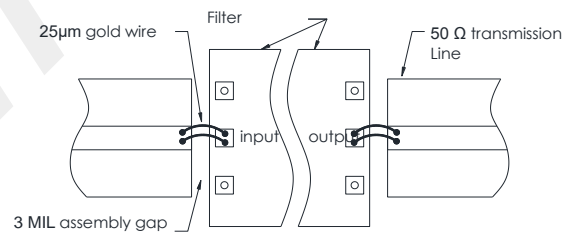
Out-of-band rejection & return loss VS freq (TA=25°C)25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip

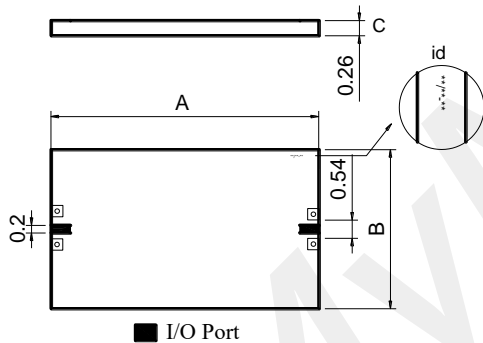
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Specification(T_A=+25°C)

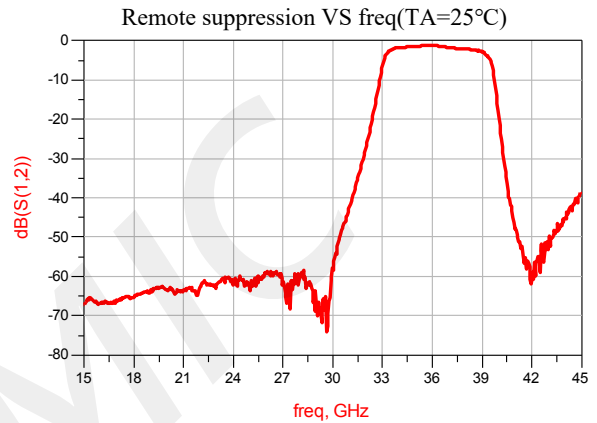
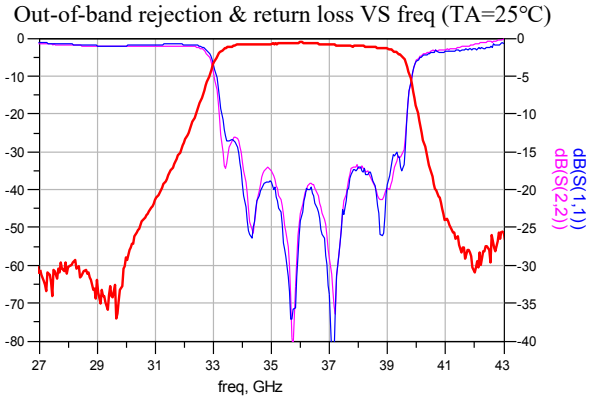
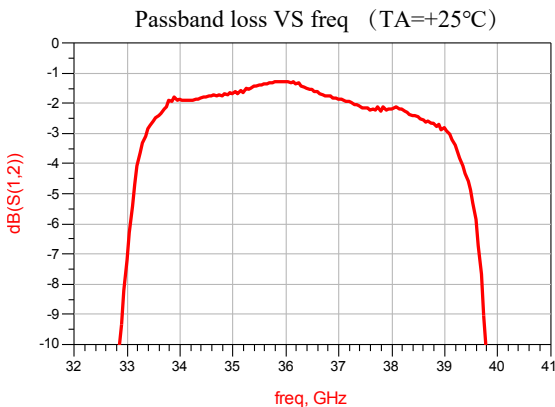
Items	Min	Typ	Max	Unit
Center Freq(f ₀)	-	35.7	-	GHz
Passband freq range	33.7	-	37.2	GHz
In-band ripple	-	-	1	dB
Center insertion loss	-	2.0	-	dB
Return loss	-	18	-	dB
Out-of-band atten	≥40@30.5GHz		-	dB
	≥40@41GHz		-	dB

Dimensions

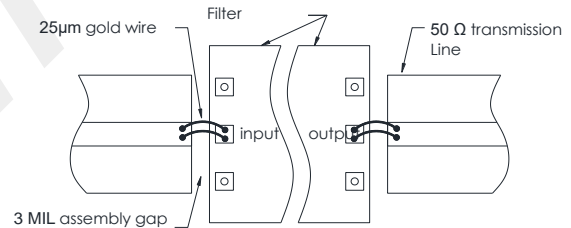


Size symbol	Value(mm)		
	Min	Nominal	Max
A	7.4	-	7.5
B	2.4	-	2.5

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
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PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

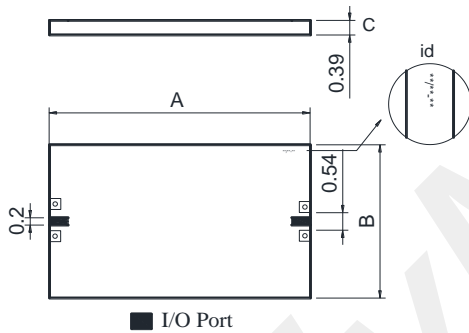
- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

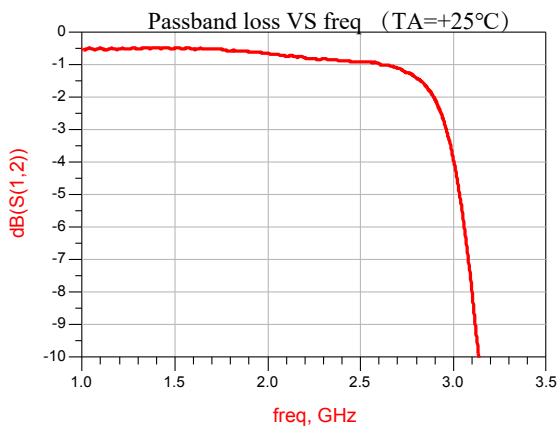
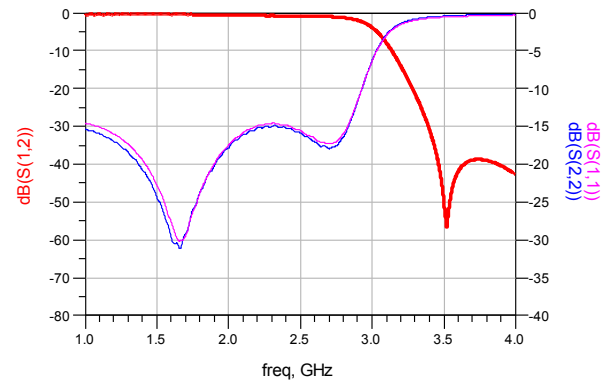
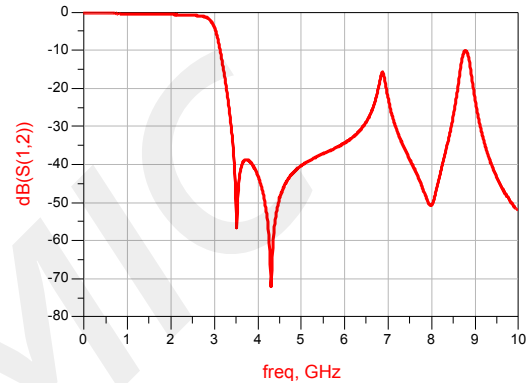
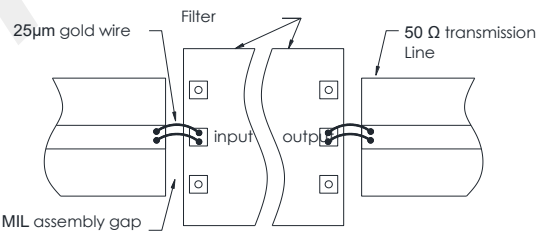
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	2.4	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@3.5GHz			dB

Dimension


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.4	-	4.5
B	4.9	-	5.0

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
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- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

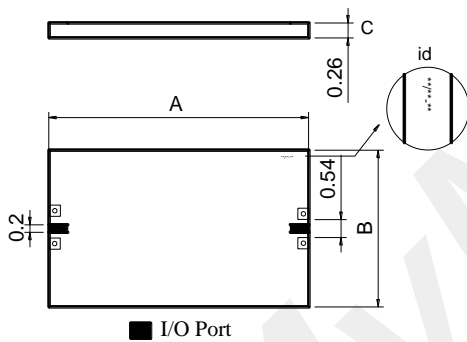
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

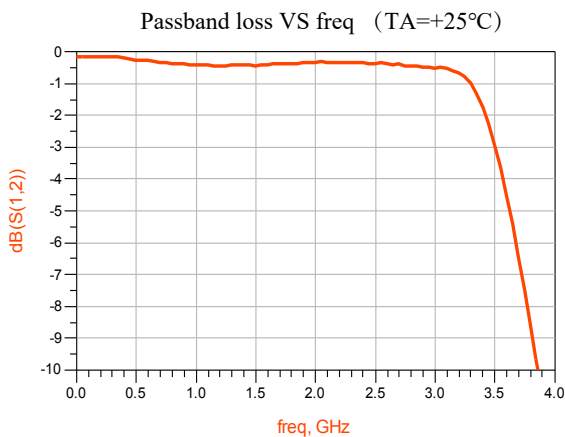
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	3	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@5.25GHz			dB

Outline size

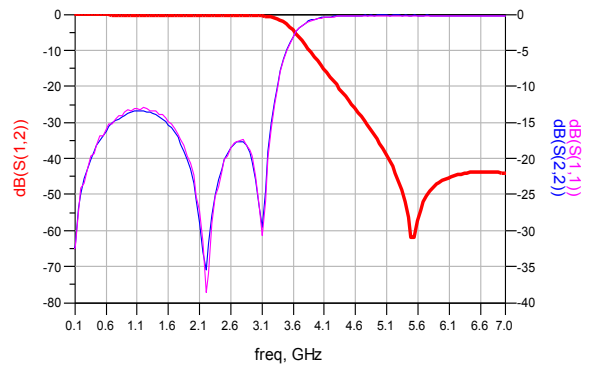


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	3.4	-	3.5

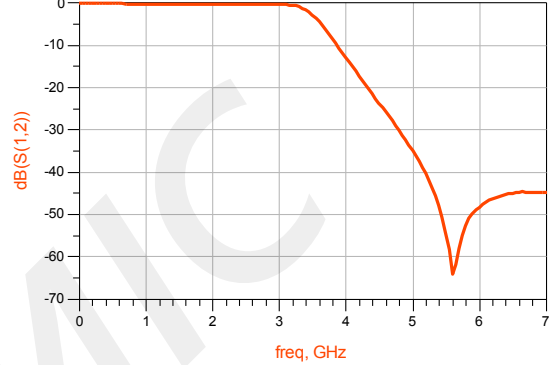
Typical test curve



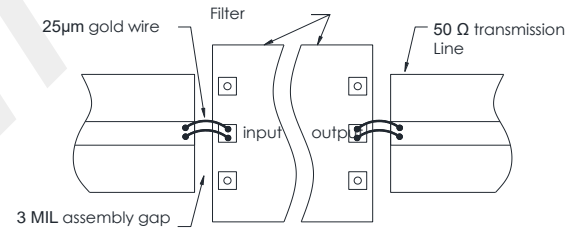
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

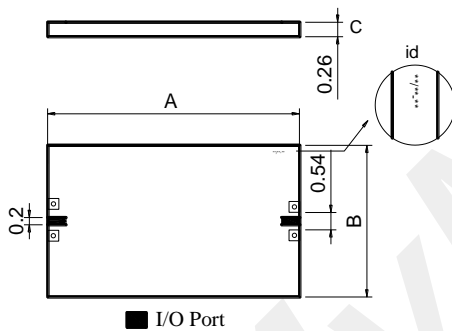
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

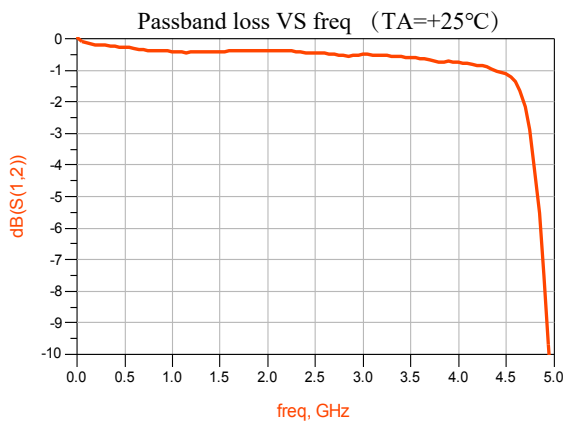
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	4.6	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@5.8GHz			dB

Outline size

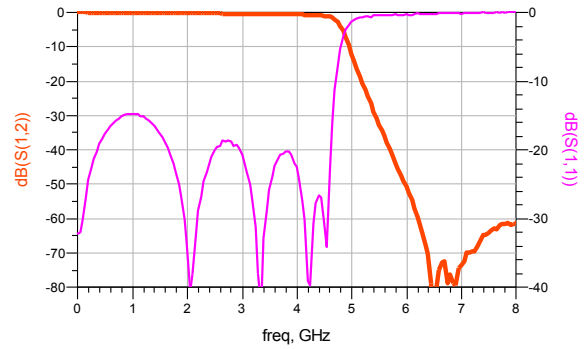


Size symbol	Value(mm)		
	Min	Nominal	Max
A	6.9	-	7
B	4.9	-	5

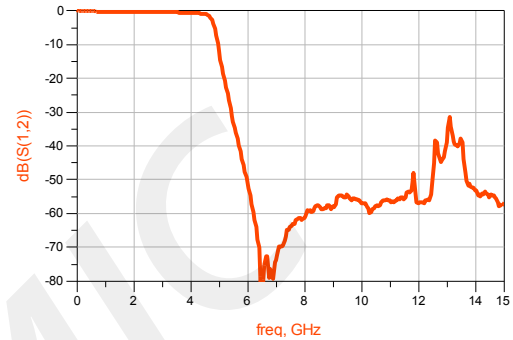
Typical test curve



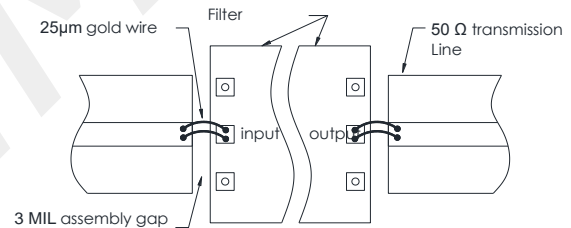
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

1. The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
2. The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
3. The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
4. When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

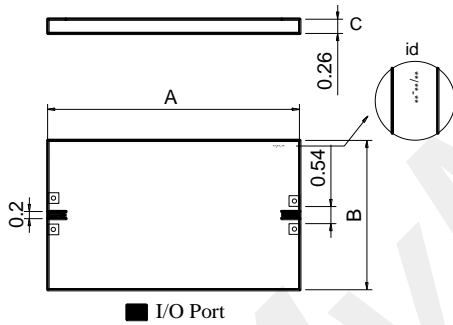
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

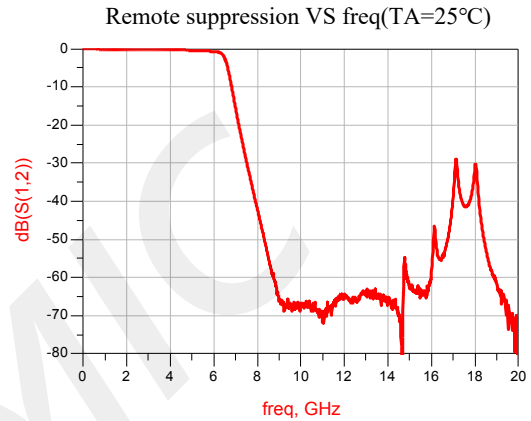
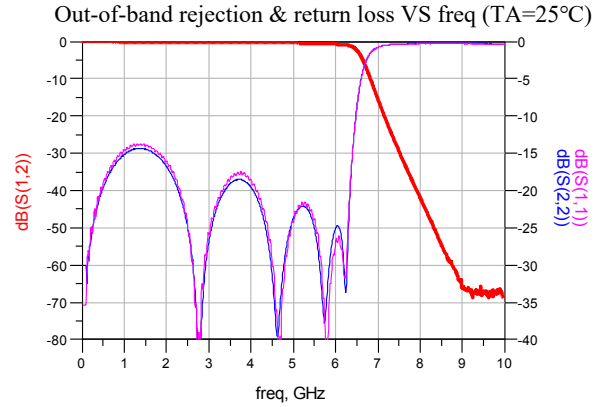
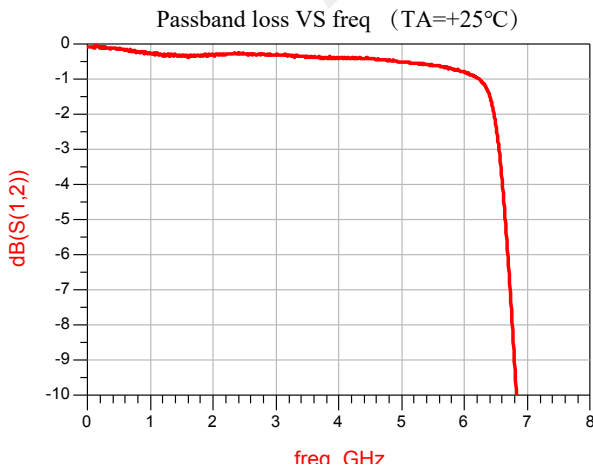
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	6.2	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@7.7GHz			dB

Outline size

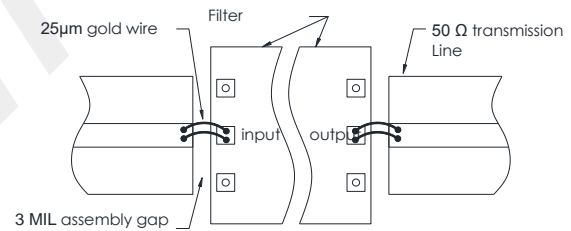


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5.0
B	3.8	-	3.9

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

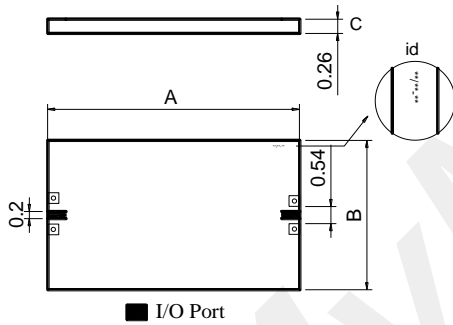
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

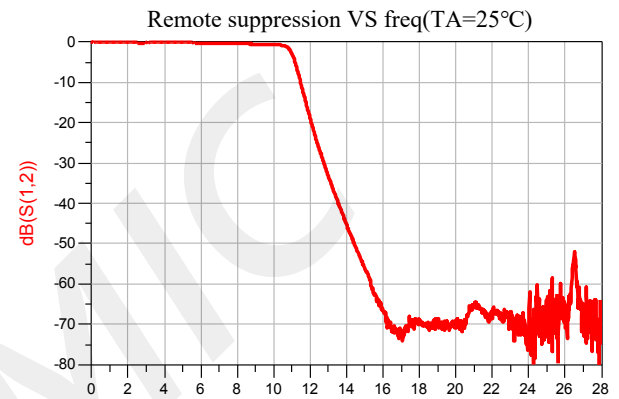
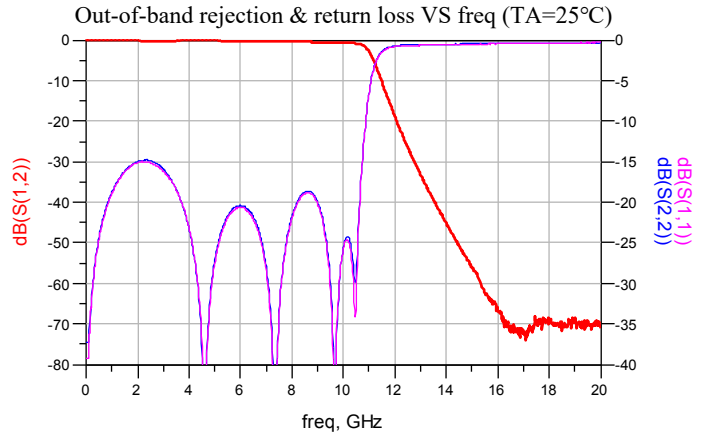
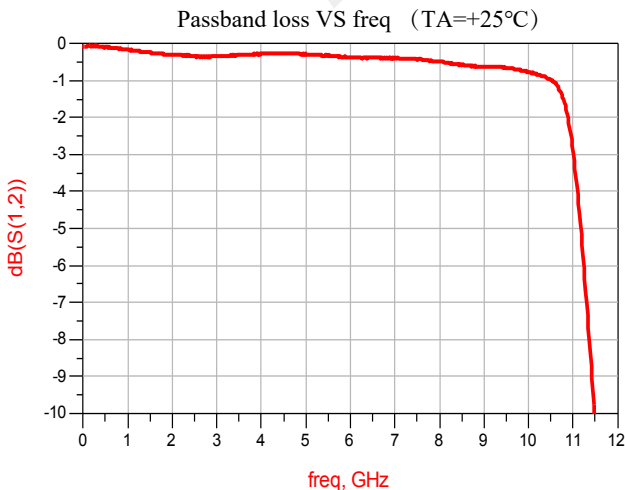
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	10.5	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	14	-	dB
Out-of-band atten	≥30@13.0GHz			dB

Outline size

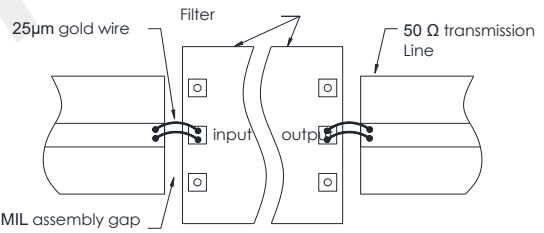


Size symbol	Value(mm)		
	Min	Nominal	Max
A	5.4	-	5.5
B	2.7	-	2.8

Typical test curve



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power,Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

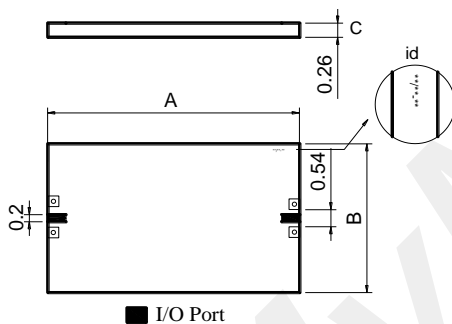
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

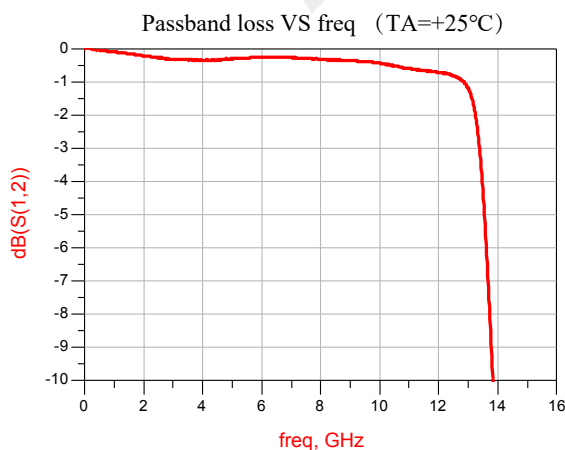
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	12.5	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@15.0GHz			dB

Outline size

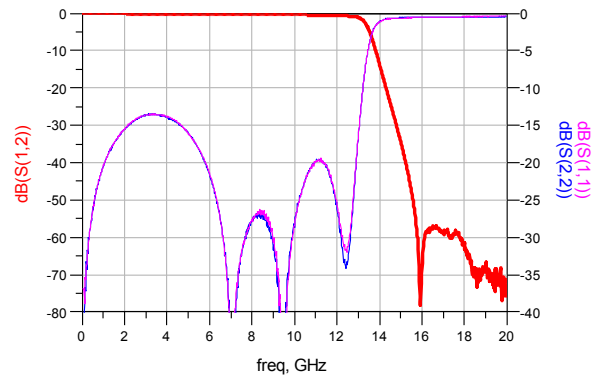


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5.0
B	2.1	-	2.2

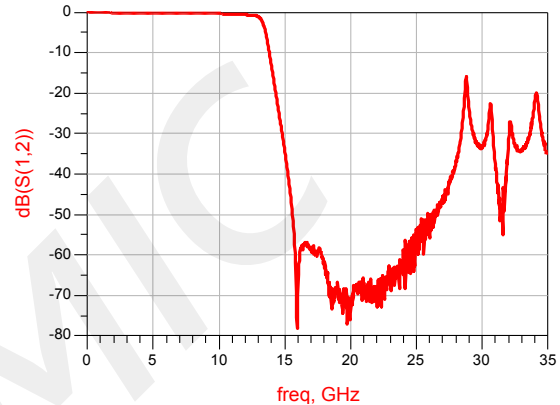
Typical test curve



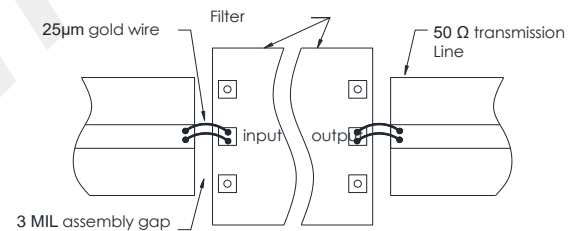
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

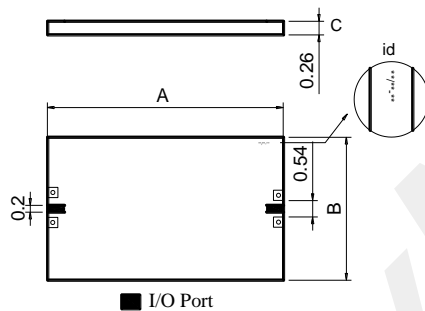
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

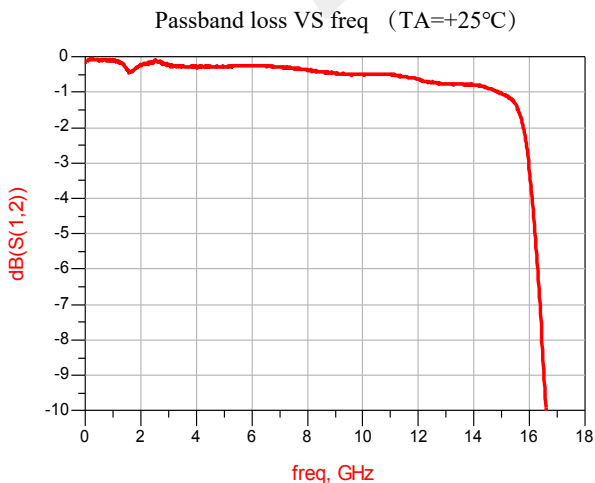
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	14.95	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@18.3GHz			dB

Outline size

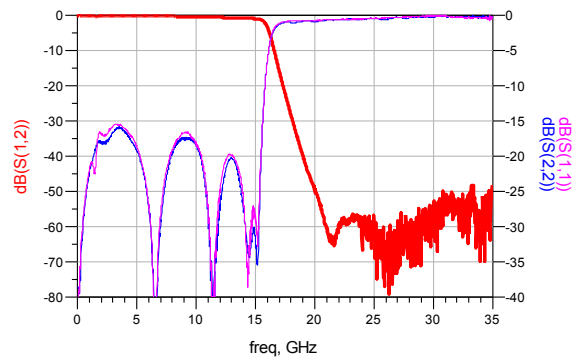


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5
B	1.9	-	2

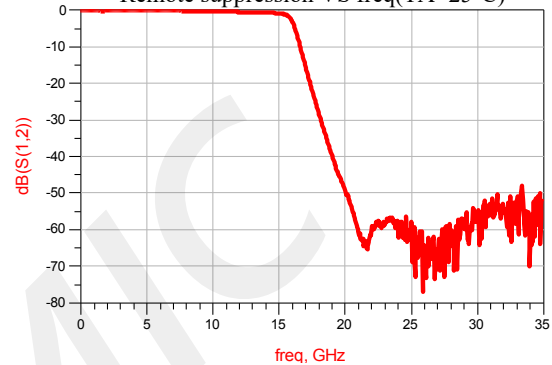
Typical test curve



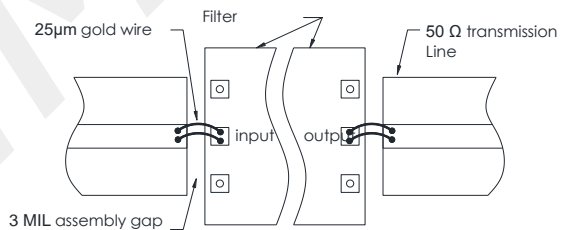
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

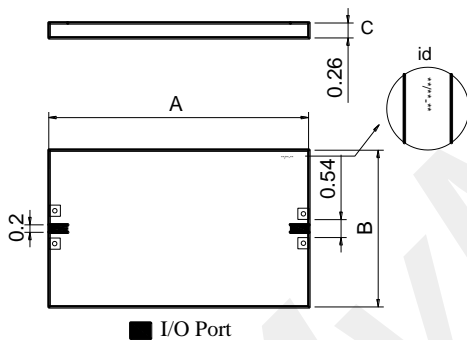
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

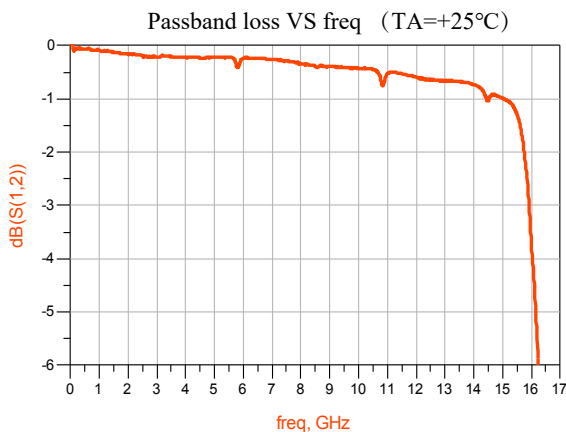
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	15	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	15	-	dB
Out-of-band atten	≥30@18.5GHz			dB

Outline size

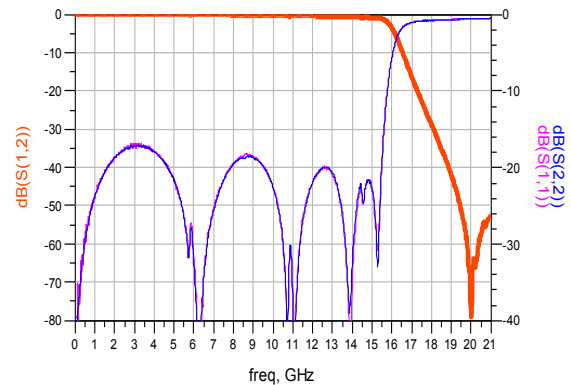


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5
B	1.9	-	2

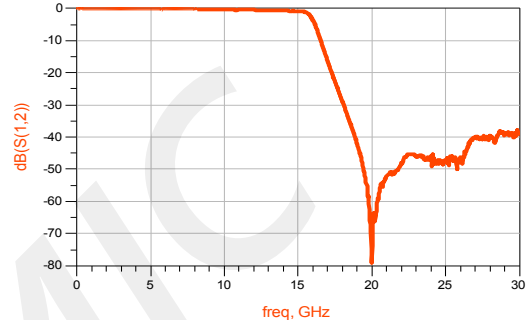
Typical test curve



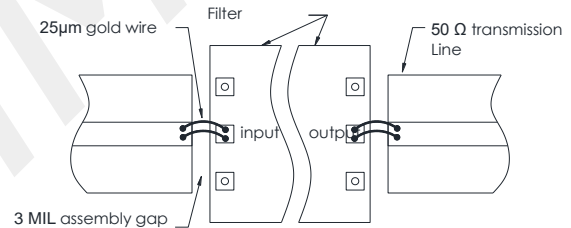
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance & Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

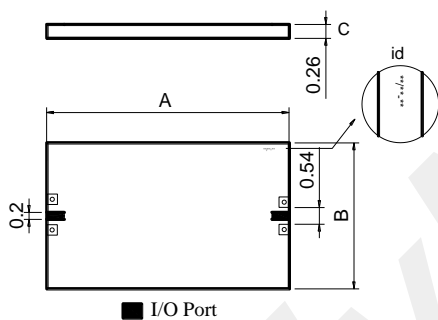
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

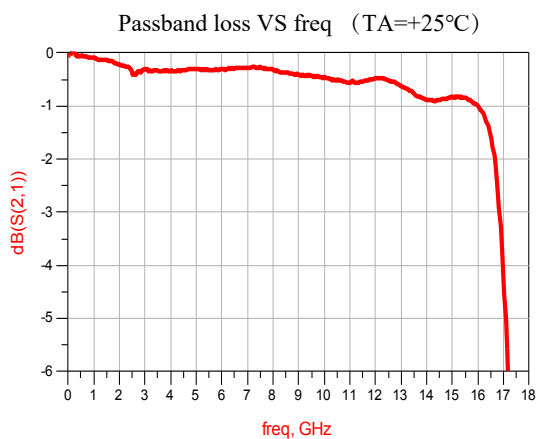
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	16	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	14	-	dB
Out-of-band atten	≥30@19.2GHz			dB

Outline

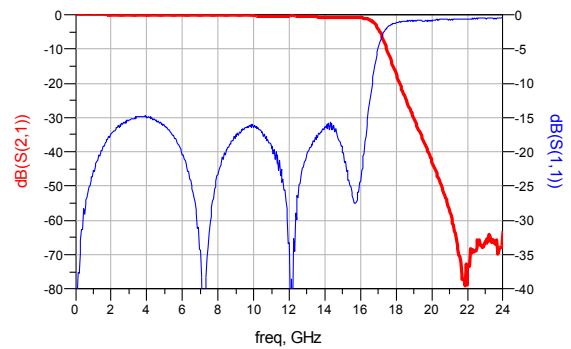


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5
B	1.9	-	2

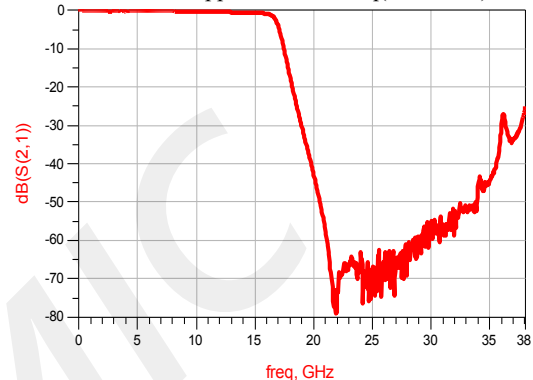
Typical test curve



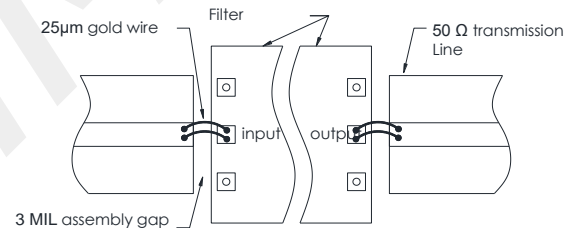
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

1. The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
2. The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
3. The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
4. When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

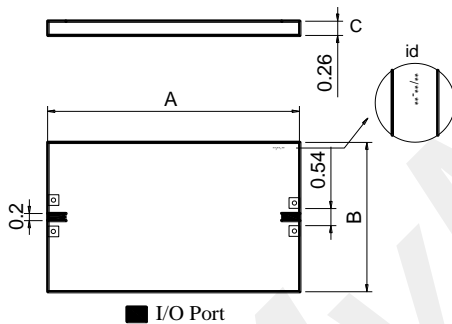
- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

Environmental parameters

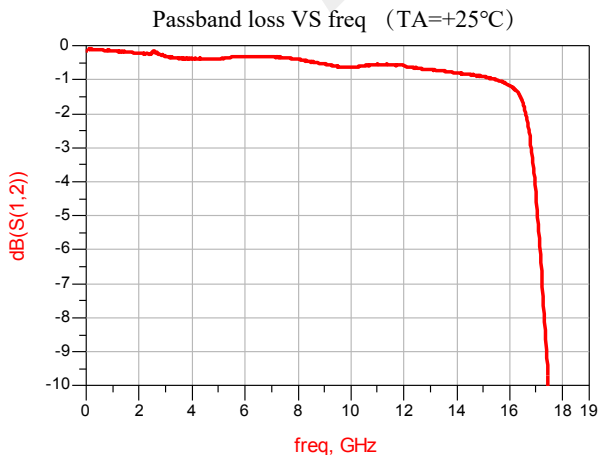
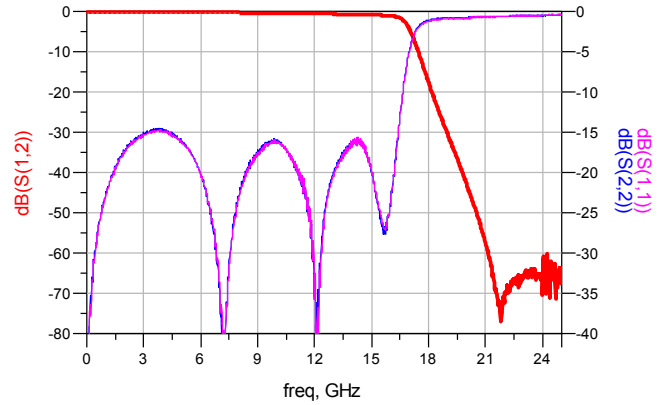
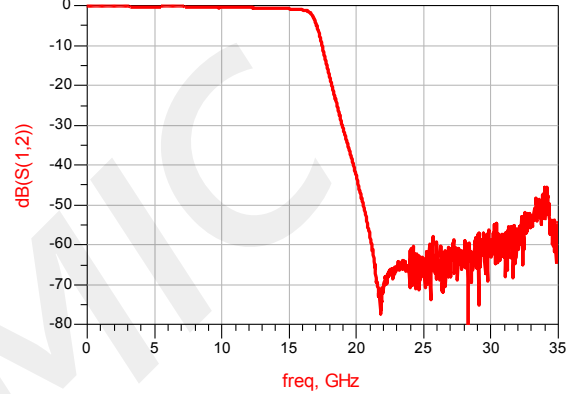
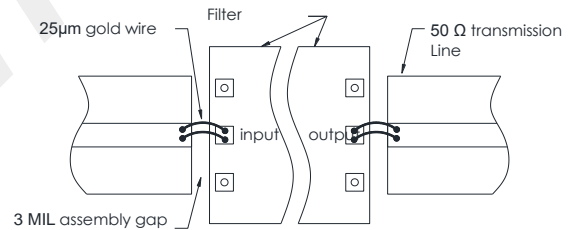
Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	16.1	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	13	-	dB
Out-of-band atten	≥30@19.2GHz			dB

Outline size


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5.0
B	1.9	-	2.0

Typical test curve

Out-of-band rejection & return loss VS freq (TA=25°C)

Remote suppression VS freq(TA=25°C)

Recommend assembly drawing

Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper (6.7ppm / °C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
- 4, When the board microstrip line is connected to the chip, it is recommended to use the microstrip line bonding.

PCB Rogers 5880, 10mil thickness	PCB Rogers 4350, 10mil thickness
Applicable Freq : DC-38GHz	Applicable Freq: DC-32GHz
Note: T-shaped graphic top substrate white side 50um; frequency 10GHz or less does not need to match	

Performance characteristics

- High precision film processing
- High Performance&Power, Low TCC
- Special ceramic substrate, 50 Ω coplanar waveguide output
- Gold wire bonding for multi-chip integrated module applications

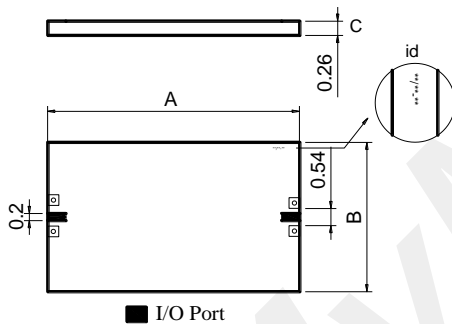
Environmental parameters

Operation temperature	-55°C~+85°C
Storage temperature	-55°C~+125°C
Max input Power	35dBm

Electrical Spec(T_A=+25°C)

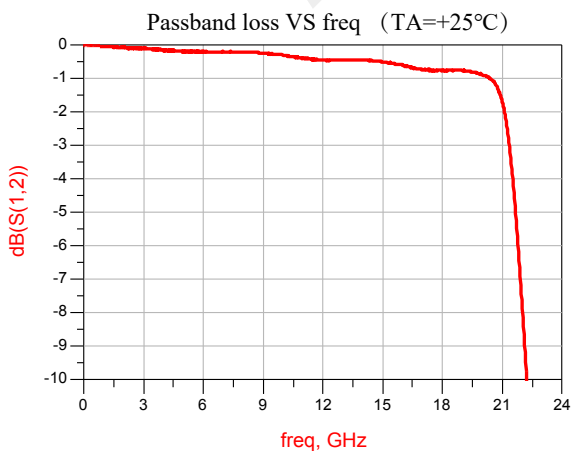
Item	Min	Typ	Max	Unit
Pass band freq range	DC	-	20.4	GHz
In-band insertion loss	-	-	1.5	dB
Return loss	-	17	-	dB
Out-of-band atten	≥30@24.8GHz			dB

Outline size

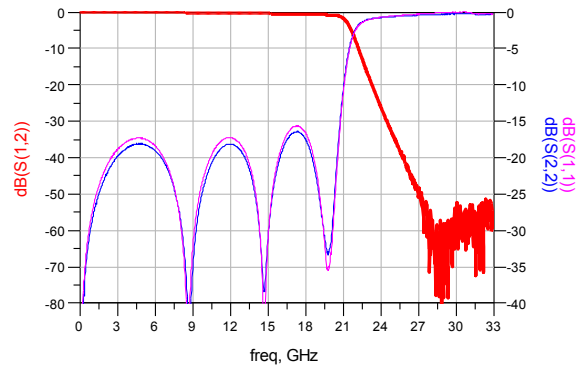


Size symbol	Value(mm)		
	Min	Nominal	Max
A	4.9	-	5.0
B	1.5	-	1.6

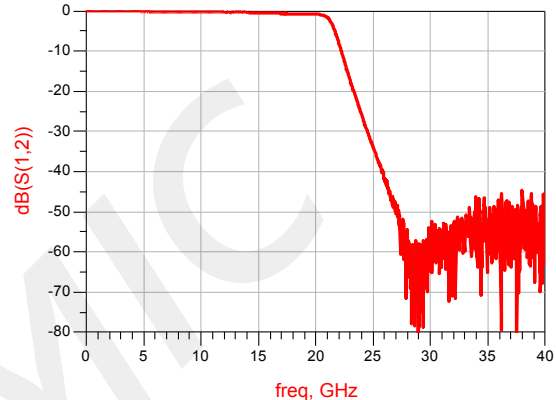
Typical test curve



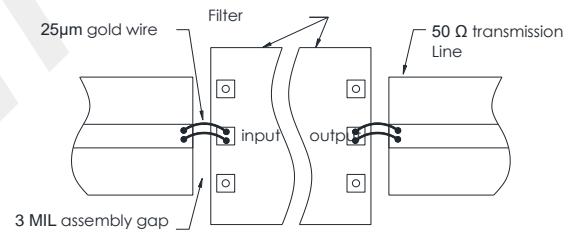
Out-of-band rejection & return loss VS freq (TA=25°C)



Remote suppression VS freq(TA=25°C)



Recommend assembly drawing



Notes

- 1, The chip is recommended to be used in different chambers. The sides are about 0.2mm from the side wall, and the surface is about 3mm away from the top cover. The chip ports are interchangeable.
- 2, The chip is recommended to be bonded with a low stress conductive adhesive such as ME8456;
- 3, The chip should be mounted on the thermal expansion coefficient of the ceramic (recommended) or molybdenum-copper(6.7ppm / ° C) on the equivalent carrier, the carrier thickness ≥ 0.2mm.
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