

Low Pass Filter

WGLL-04400-2012

50Ω

DC to 4400 MHz

Ver. A

2025.09.08

Maximum Rating

Operating Temperature -55°C~+125°C

Storage Temperature -55°C~+125°C

RF Input Power 4.5W max at 25°C

Pin Connections

RF Input 8

RF Output 4

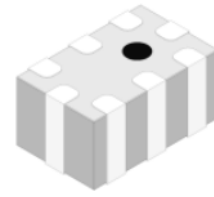
Ground 1,2,3,5,6,7

Features

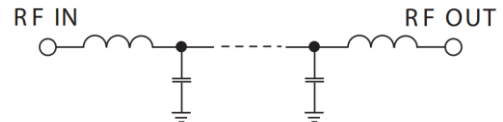
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

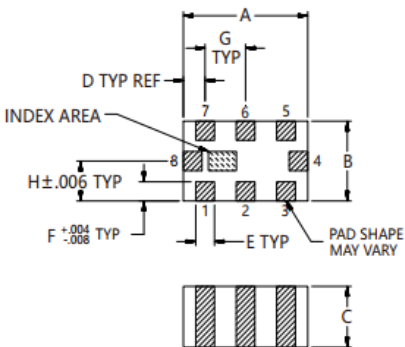


RoHS Compliant



Functional Schematic

Outline Drawing

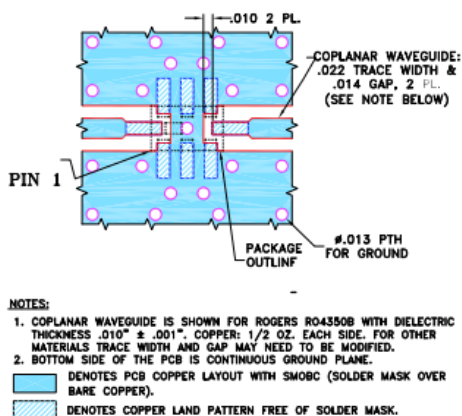


Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	Wt.
.079	.049	.037	.014	.012	.012	.026	grams
2.00	1.25	0.95	0.35	0.30	0.30	0.65	.008

Note: Please refer to case style drawing for details

Demo Board MCL P/N: CG-2012 Suggested PCB Layout



NOTES:

1. COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
 2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

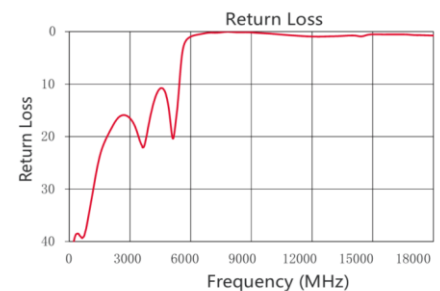
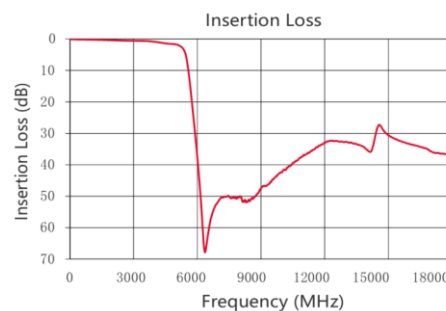
Electrical Specifications⁽¹⁾ at 25°C

Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-4400	--	1.6	2.1	dB
	Freq. Cut-off	5200	--	3.0	--	dB
	Return Loss	DC-4400	--	11	--	dB
Stop Band	Rejection Loss	6200-6700	20	40	--	dB
		6700-8800	35	45	--	dB
		8800-12200	25	33	--	dB
		12200-18000	--	20	--	dB

(1) Test on our Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
100	0.11	42.69
1000	0.23	34.16
2000	0.41	19.04
3000	0.60	16.50
4000	0.90	16.31
4400	1.31	11.25
5750	20.40	1.83
6200	54.37	0.68
6700	55.70	0.31
7200	50.37	0.20
8000	50.02	0.06
8800	49.50	0.11
12200	32.49	0.94
14000	35.23	0.73
18000	36.11	0.75



Notes

- a. The specifications are tested at 25°C±5°C, relative humidity 55~75%.
 - b. Other quality and characteristic not specify in this datasheet.
- Please contact us for detail requirements.



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