

Low Pass Filter

WGLL-01575-2012

50Ω DC to 1575 MHz

Ver. A
2024.11.05

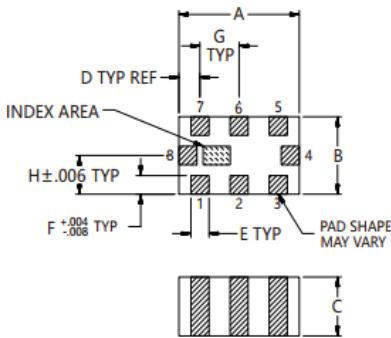
Maximum Rating

Operating Temperature	-55°C~+125°C
Storage Temperature	-55°C~+125°C
RF Input Power	5.5W max at 25°C

Pin Connections

RF Input	8
RF Output	4
Ground	1,2,3,5,6,7

Outline Drawing

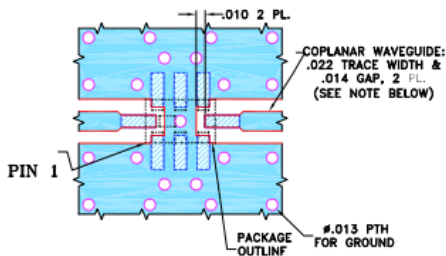


Outline Dimensions (inch)

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

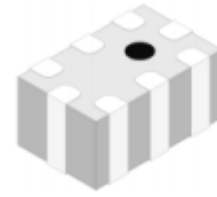


NOTES:

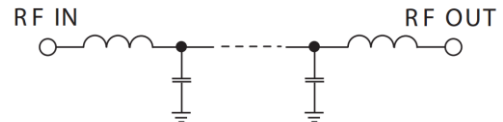
- COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).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

Features

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



RoHS Compliant



Functional Schematic

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

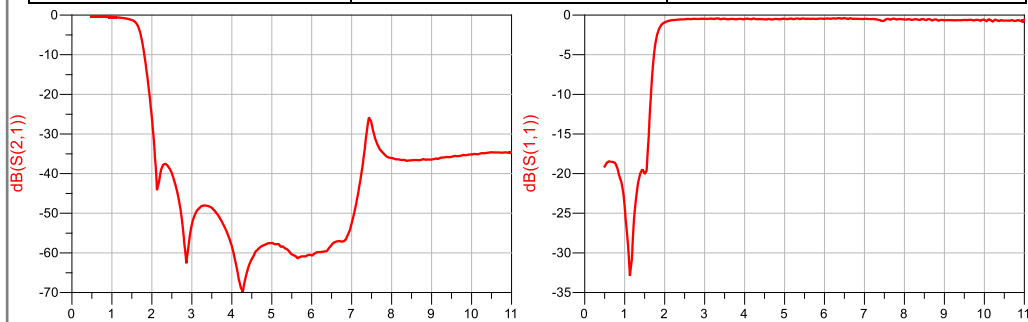
Electrical Specifications⁽¹⁾ at 25°C

Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-1575	-	0.9	1.8	dB
	Freq. Cut-off	1850	-	3.0	-	dB
	Return Loss	DC-1575	-	18	-	dB
Stop Band	Rejection Loss	2175-2400	20	30	-	dB
		2400-7000	40	50	-	dB
		7000-12000	-	35	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
500	0.313	19.09
1000	0.517	24.20
1575	1.699	17.33
1850	12.73	1.896
1960	21.93	1.039
2175	42.26	0.648
2400	38.08	0.549
3000	52.88	0.471
4000	58.31	0.492
5000	57.53	0.476
6000	60.65	0.474
7000	52.48	0.477
8000	36.05	0.563
9000	36.45	0.661
10000	35.21	0.606



Notes

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



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