

Low Pass Filter

WGLL-05000

50Ω DC to 5000 MHz

Ver. A
2022.01.17

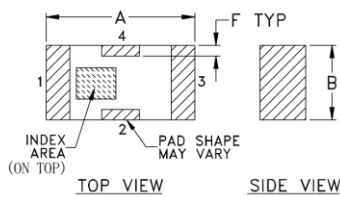
Maximum Rating

Operating Temperature	-55°C~+100°C
Storage Temperature	-55°C~+100°C
RF Input Power	9W max at 25°C

Pin Connections

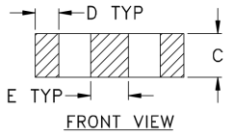
RF Input	1
RF Output	3
Ground	2,4

Outline Drawing



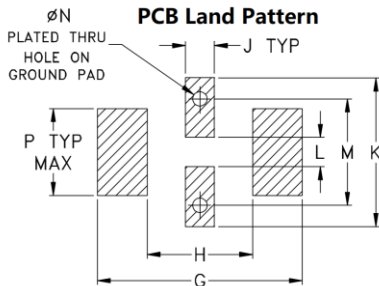
TOP VIEW

SIDE VIEW



FRONT VIEW

PCB Land Pattern



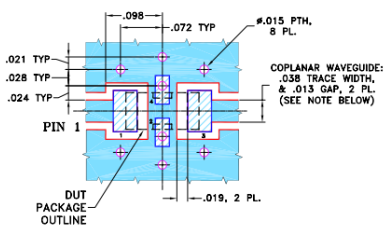
Suggested Layout

Tolerance to be within $\pm .002$

Outline Dimensions (Tolerance) mm

A	B	C	D	E	F	G
3.20	1.60	0.95	0.51	0.81	0.23	4.29
± 0.2	± 0.2	± 0.2	± 0.1	± 0.1	± 0.1	± 0.1
H	J	K	L	M	N	P
2.21	0.61	3.10	0.61	2.21	0.30	1.8
						wt
						.020

Demo Board MCL P/N: T-39 Suggested PCB Layout (PL-137)



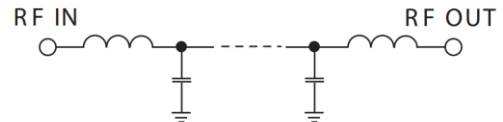
- NOTES:
- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" \pm .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER 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



Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

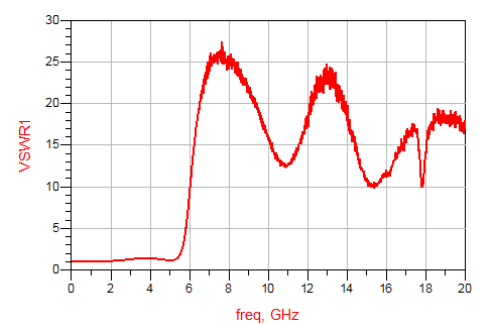
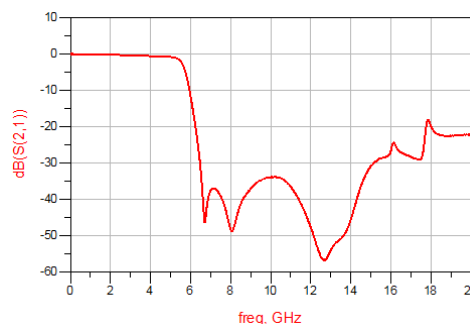
Electrical Specifications⁽¹⁾ at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-5000	-	1.3	2.0	dB
	Freq. Cut-off	5610	-	3.0	-	dB
	VSWR	DC-5000	-	1.6	2.0	:1
Stop Band	Rejection Loss	6850	25	30	-	dB
		7050	20	30	-	dB
		18000	15	20	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
500	0.092	1.012
2000	0.24	1.078
3000	0.4	1.303
4000	0.618	1.431
5000	0.844	1.159
5610	3.043	2.477
6850	40.46	24.08
7050	37.18	26.17
8000	48.42	24.06
10000	34.12	15.56
11000	36.55	12.50
13000	53.91	22.49
15000	31.05	10.56
18000	19.96	13.88
20000	22.21	17.11



Notes

- The specifications are tested at 25°C \pm 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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