

Low Pass Filter

WGLL-01575

50Ω DC to 1575 MHz

Ver. A
2022.02.22

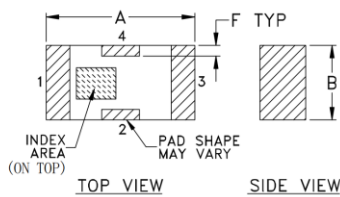
Maximum Rating

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

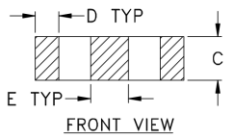
Pin Connections

RF Input	1
RF Output	3
Ground	2,4

Outline Drawing

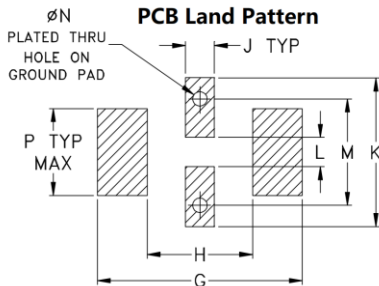


TOP VIEW SIDE VIEW



FRONT VIEW

PCB Land Pattern



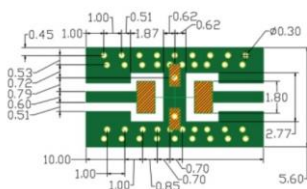
Suggested Layout

Tolerance to be within ± 0.002

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	
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: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" \pm .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

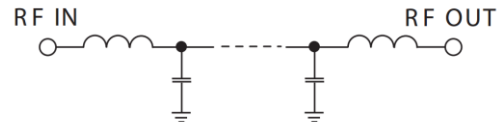
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER) DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

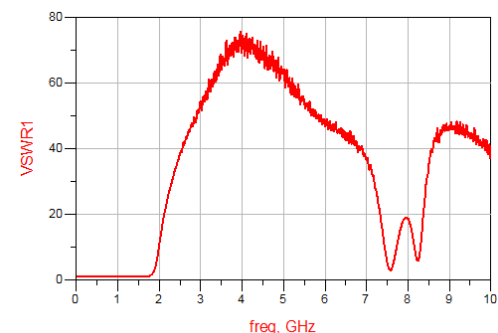
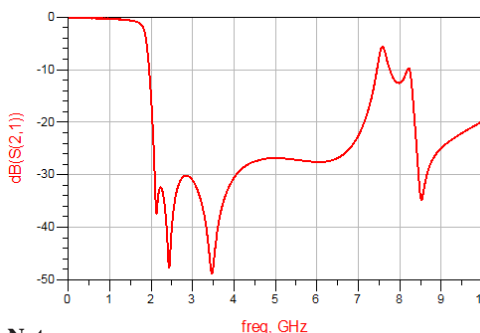
Electrical Specifications⁽¹⁾ at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-1575	-	0.8	1.0	dB
	Freq. Cut-off	1790	-	3.0	-	dB
	VSWR	DC-1575	-	1.2	1.5	:1
Stop Band	Rejection Loss	2150	25	30	-	dB
		2380-5800	28	33	-	dB
		6800	20	25	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.07	1.03
1000	0.36	1.18
1500	0.68	1.08
1700	1.14	1.12
1844	3.02	2.07
2141	37.28	19.59
2245	32.52	24.94
2461	48.77	33.65
2867	31.75	45.06
3472	50.29	62.72
4507	30.05	71.50
5504	31.16	61.05
6509	31.93	50.33
7000	25.36	40.04
7500	7.15	4.18



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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