

Low Pass Filter

WGLL-00120

50Ω DC to 120 MHz

Ver. A

2022.02.22

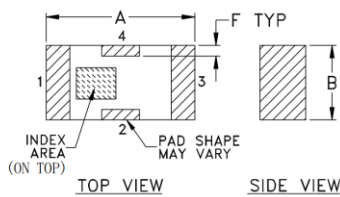
Maximum Rating

Operating Temperature	-55°C~+100°C
Storage Temperature	-55°C~+100°C
RF Input Power	8.5W max at 25°C

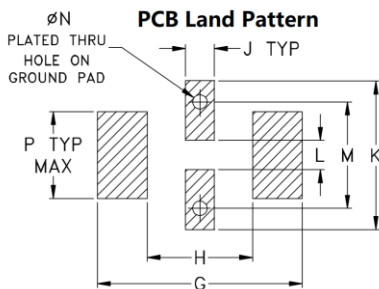
Pin Connections

RF Input	1
RF Output	3
Ground	2,4

Outline Drawing



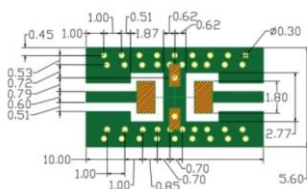
PCB Land Pattern



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	wt
2.21	0.61	3.10	0.61	2.21	0.30	1.8	.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" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

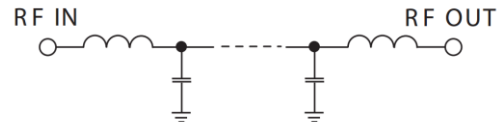
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER) DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

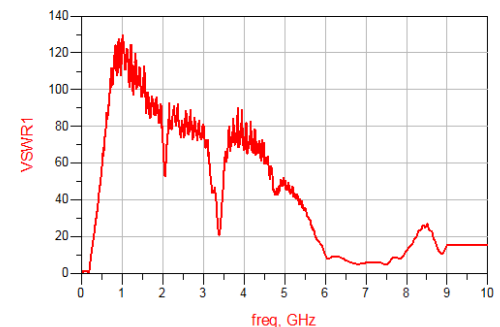
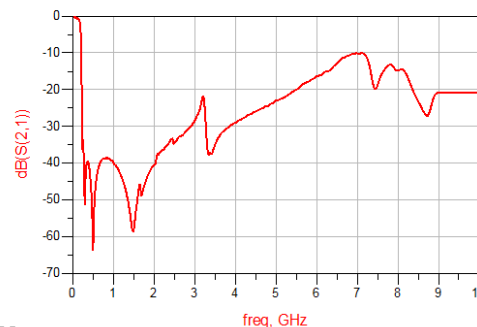
Electrical Specifications⁽¹⁾ at 25°C

Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-120	-	0.9	1.0	dB
	Freq. Cut-off	180	-	3.0	-	dB
	VSWR	DC-120	-	1.2	1.5	:1
Stop Band	Rejection Loss	280	20	30	-	dB
		300-1850	30	40	-	dB
		4750	15	20	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.11	1.05
100	0.60	1.18
120	0.76	1.14
135	0.96	1.09
195	9.87	3.57
270	43.72	16.78
280	50.16	18.28
285	51.48	18.81
300	45.12	21.53
920	39.13	127.50
1100	41.68	120.72
1850	43.04	91.29
2000	40.36	69.85
4000	28.98	73.00
4750	24.51	43.65



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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