

Low Pass Filter

WGLL-00105

50Ω DC to 105 MHz

Ver. B
2024.09.02

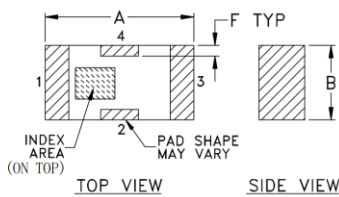
Maximum Rating

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

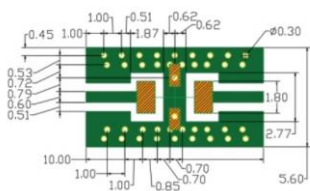
Outline Drawing



Outline Dimensions (Tolerance)

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.

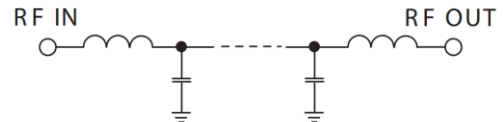
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER) DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

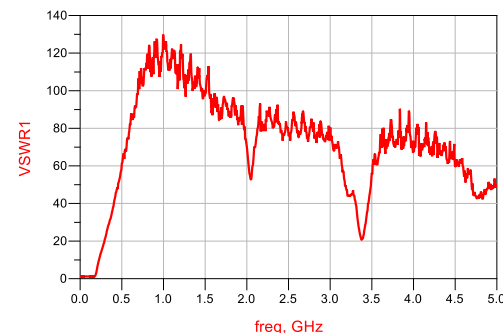
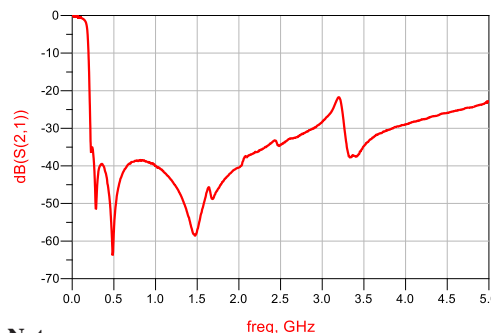
Electrical Specifications⁽¹⁾ at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-105	-	0.9	1.0	dB
	Freq. Cut-off	180	-	3.0	-	dB
	VSWR	DC-105	-	1.2	-	:1
Stop Band	Rejection Loss	250	20	-	-	dB
		265-1650	-	40	-	dB
		4750	-	20	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.17	1.04
50	0.44	1.08
100	0.73	1.08
105	0.78	1.09
125	0.98	1.16
180	3.08	1.92
215	10.55	2.88
250	31.43	4.46
265	45.61	5.31
700	46.98	56.04
1000	55.37	78.97
1650	51.39	78.97
2000	43.21	82.73
3000	31.32	21.73
4750	25.73	56.04



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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