

Low Pass Filter

WGLL-00160

50Ω DC to 160 MHz

Ver. A
2022.03.16

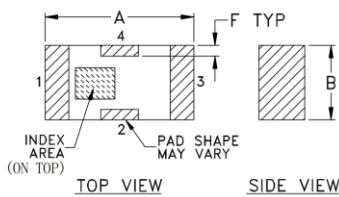
Maximum Rating

Operating Temperature	-55°C~+100°C
Storage Temperature	-55°C~+100°C
RF Input Power	8W max at 25°C

Pin Connections

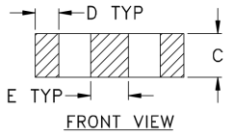
RF Input	1
RF Output	3
Ground	2,4

Outline Drawing



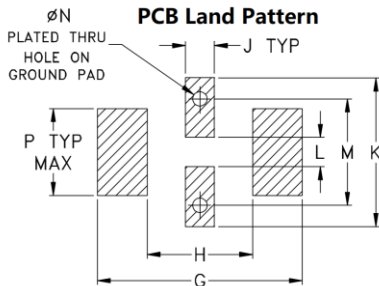
TOP VIEW

SIDE VIEW



FRONT VIEW

PCB Land Pattern



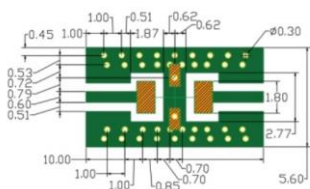
Suggested Layout

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.

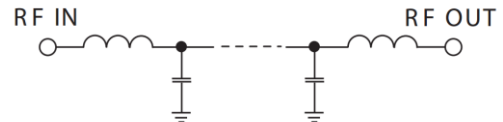
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER) DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

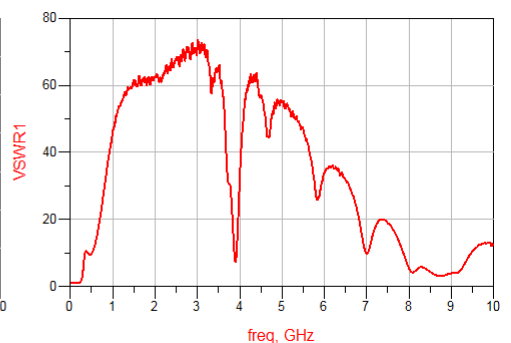
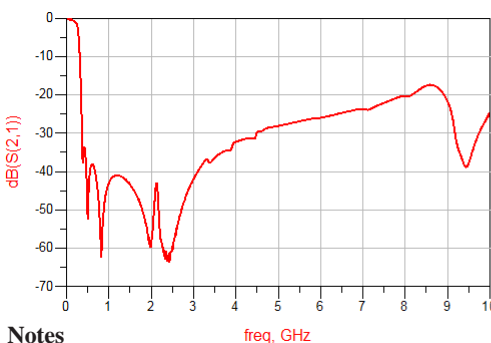
Electrical Specifications⁽¹⁾ at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-160	-	0.9	1.0	dB
	Freq. Cut-off	270	-	3.0	-	dB
	VSWR	DC-160	-	1.2	1.5	:1
Stop Band	Rejection Loss	330-480	20	30	-	dB
		480-2700	30	40	-	dB
		2700-6100	15	20	-	dB

(1) Tested on Demo Board.

Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.25	1.06
100	0.43	1.06
160	0.68	1.11
210	1.06	1.20
230	1.37	1.13
325	14.52	8.36
370	34.48	10.62
525	43.48	10.42
950	44.53	42.37
1700	47.20	61.79
2350	61.70	65.80
4500	29.67	71.94
6400	24.99	56.91
7500	22.12	18.86
9000	21.74	3.99



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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