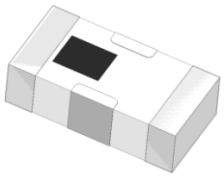
Low Pass Filter

WGLL-00190

50Ω DC to 190 MHz

Ver. B

2021.05.12



RoHS Compliant

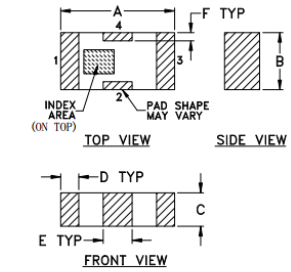
Maximum Rating

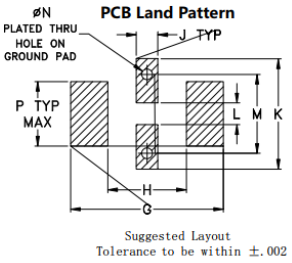
OperatingTemperature	-55℃~+100℃
StorageTemperature	-55℃~+100℃
RF Input Power	10W max at 25℃

Pin Connections

RF Input	1
RF Output	3
Ground	2,4

Outline Drawing





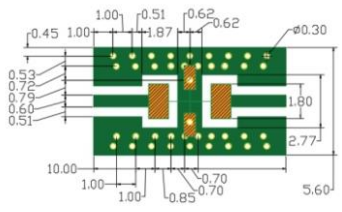
Suggested Layout
Tolerance to be within ±.002

Outline Dimensions(mm Tolerance)

A	B	C	D	E	F	G
3.20 ±0.2	1.60 ±0.2	0.95 ±0.2	0.51 ±0.1	0.81 ±0.1	0.23 ±0.1	4.29

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)



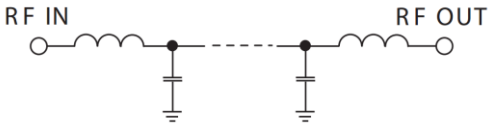
NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

Application

- Harmonic Rejection
- Transmitters/Receivers
- Base Station of Mobile Communication
- Lab Use



Functional Schematic

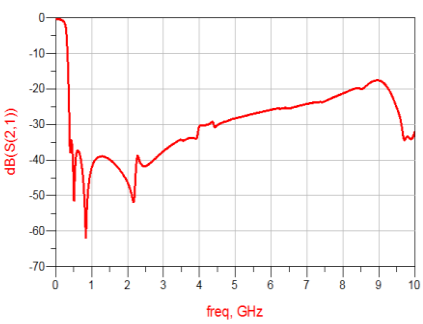
Electrical Specifications(1) at 25℃

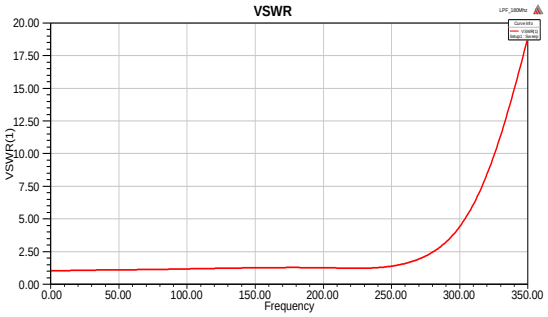
Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-190	-	0.8	1.0	dB
	Freq. Cut-off	280	-	3.0	-	dB
	VSWR	DC-190	-	1.2	1.5	:1
Stop Band	Rejection Loss	400-510	20	30	-	dB
		510-2850	30	40	-	dB
		2850-6550	15	25	-	dB

(1) Tested on Demo Board.

Typical Performance at 25℃

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.25	1.04
100	0.43	1.07
170	0.69	1.14
190	0.79	1.15
250	1.52	1.38
340	14.76	8.08
375	28.83	10.13
400	37.45	10.22
510	50.73	10.48
850	57.30	33.63
1500	39.82	64.43
2850	38.81	73.02
4550	29.83	63.79
6500	25.45	26.66
9000	17.61	4.07





Notes

a. The specifications are tested at 25℃±5℃, relative humidity 55~75%.
b. Other quality and characteristic not specify in this datasheet.
Please contact us for detail requirements.

Well Genius Technology （Shanghai） LTD.

Room 1001, Block C, Hi-Tech Building, No.900 Yi Shan Rd, Shanghai, P.R.C, 200233 Tel: (021) 6495 8888 Fax: (021) 5423 5889 www.wellgenius.com