

# Low Pass Filter

WGLL-00180

50Ω DC to 180 MHz

Ver. B  
2021.05.12

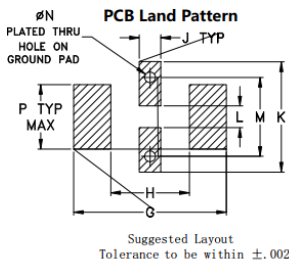
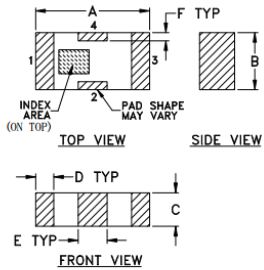
## Maximum Rating

Operating Temperature	-55°C~+100°C
Storage Temperature	-55°C~+100°C
RF Input Power	10W max at 25°C

## Pin Connections

RF Input	1
RF Output	3
Ground	2,4

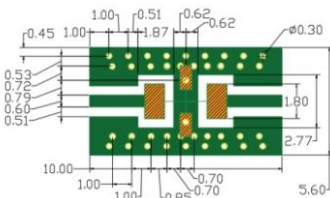
## Outline Drawing



## 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

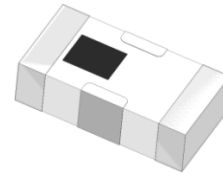
## Demo Board MCL P/N: T-39 Suggested PCB Layout (PL-137)



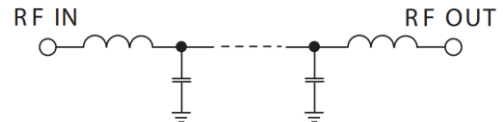
- NOTES:
- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
    - DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK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



## Application

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

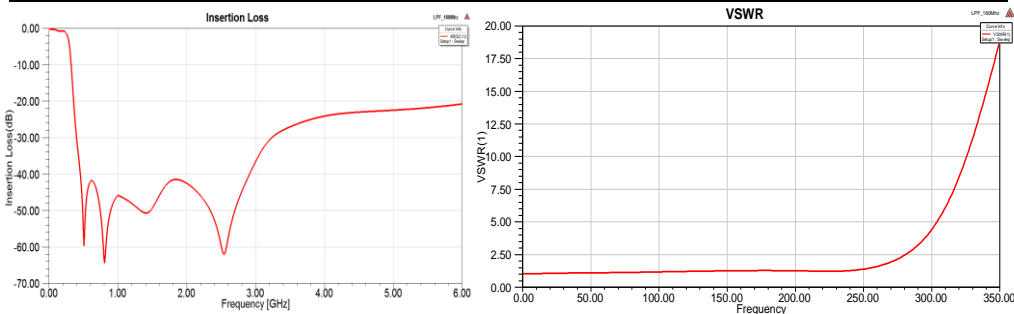
## Electrical Specifications<sup>(1)</sup> at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-180	-	0.8	1.0	dB
	Freq. Cut-off	270	-	3.0	-	dB
	VSWR	DC-180	-	1.2	1.5	:1
Stop Band	Rejection Loss	370-525	20	30	-	dB
		525-2350	30	40	-	dB
		2350-6400	15	25	-	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
180	0.80	1.14
270	3.38	2.42
300	7.97	5.13
325	14.52	8.36
370	34.38	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±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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