

# Low Pass Filter

# WGLL-09170

50Ω DC to 9170 MHz

Ver. A  
2022.02.22

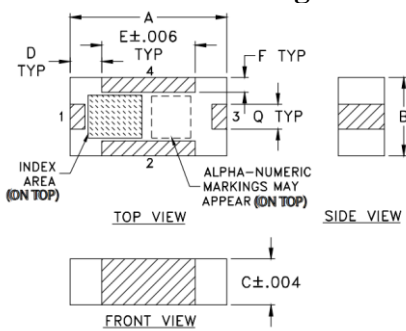
## Maximum Rating

Operating Temperature	-55°C~+100°C
Storage Temperature	-55°C~+100°C
RF Input Power	7W max at 25°C

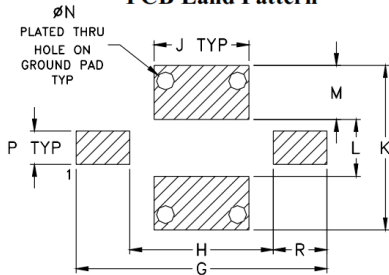
## Pin Connections

RF Input	1
RF Output	3
Ground	2,4

## Outline Drawing



## PCB Land Pattern

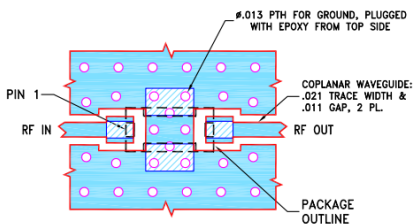


Suggested Layout,  
Tolerance to be within ±002

## Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J
.126	.063	.037	.026	.075	.012	.182	.104	.069
3.20	1.60	0.94	0.66	1.91	0.30	4.62	2.64	1.75
K	L	M	N	P	Q	R	wt	
.119	.041	.039	.013	.024	.020	.039	grams	
3.02	1.04	0.99	0.33	0.61	0.51	0.99	.020	

Demo Board MCL P/N: T-11  
Suggested PCB Layout (PL-137)

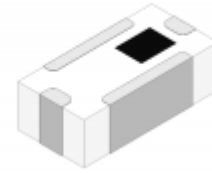


NOTES:  
1. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010±.001, COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

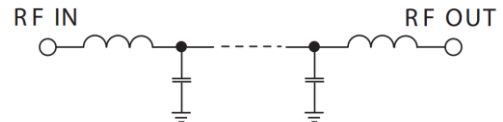
■ DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

## Features

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



RoHS Compliant



## Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

## Functional Schematic

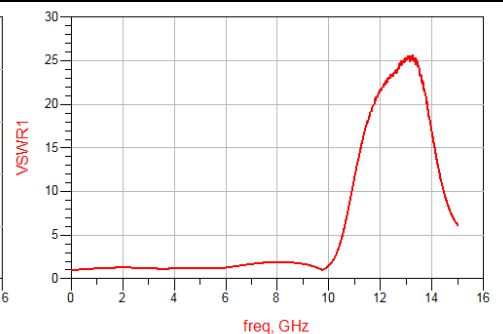
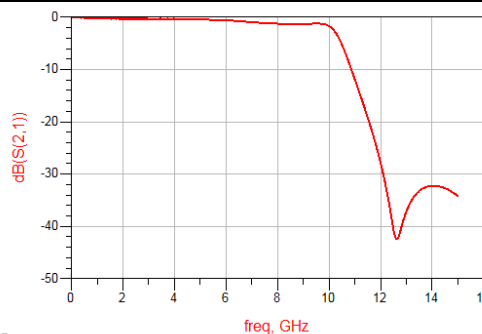
## Electrical Specifications<sup>(1)</sup> at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	DC-9170	-	1.0	3.0	dB
	Freq. Cut-off	9800	-	3.0	-	dB
	VSWR	DC-9170	-	1.2	2.0	:1
Stop Band	Rejection Loss	11630-18770	20	30	-	dB
	VSWR	11630-18770	-	20	-	:1

(1) Tested on Demo Board.

## Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1000	0.17	1.18
2000	0.30	1.28
4000	0.39	1.17
6000	0.60	1.28
9160	1.27	1.61
9800	1.33	1.07
10000	1.71	1.50
11360	17.11	16.59
11620	21.09	19.23
12000	27.82	21.70
14000	32.28	16.78
16000	38.07	6.33
18000	43.71	28.13
18760	31.92	24.29
19000	29.87	22.05



## 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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