

# Low Pass Filter

# WGLL-01500

50Ω DC to 1500 MHz

Ver. C  
2024.03.12

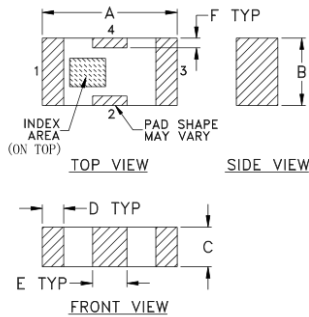
## Maximum Rating

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

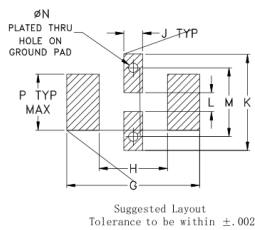
## Pin Connections

RF Input	1
RF Output	3
Ground	2,4

## Outline Drawing



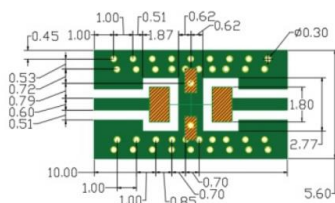
## PCB Land Pattern



## Outline Dimension (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	wt
2.21	0.61	3.10	0.61	2.21	0.30	1.8	.020

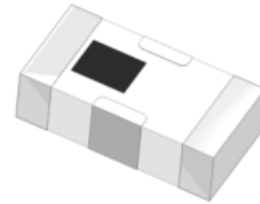
## Suggest PCB Layout



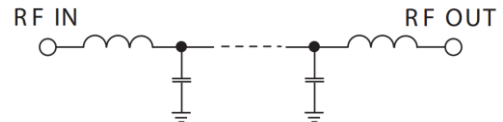
- NOTES:
- COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
    - DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK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



Functional Schematic

## Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

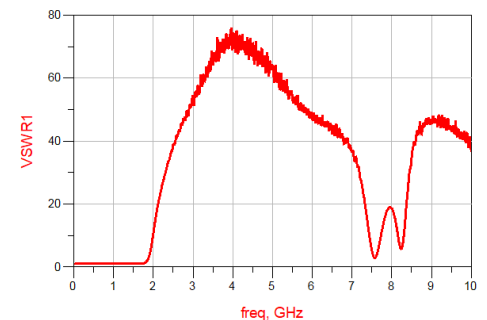
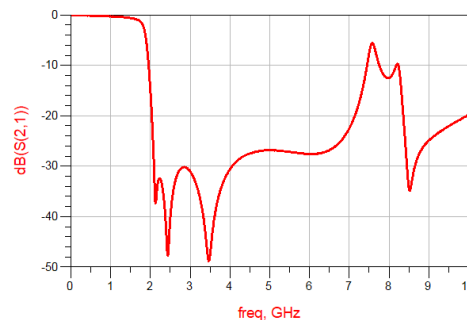
## Electrical Specifications<sup>(1)</sup> at 25°C

Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-1500	-	1.0	1.3	dB
	Freq. Cut-off	1843	-	3.0	-	dB
	VSWR	DC-1500	-	1.2	1.5	:1
Stop Band	Rejection Loss	2220	25	30	-	dB
		2380-5800	20	25	-	dB
		6800	15	20	-	dB

(1) Test on our Demo Board.

## Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.08	1.01
1000	0.32	1.11
1500	0.64	1.15
1700	1.06	1.03
1844	2.93	2.03
2141	36.65	21.36
2245	32.52	27.27
2461	44.76	36.79
2867	31.69	48.44
3472	49.08	68.37
4507	27.47	71.08
5504	27.16	53.29
6509	26.78	43.57
7000	22.52	36.41
7500	7.61	5.11



## 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.



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