

# High Pass Filter

## WGLH-04600

50Ω      5000 to 9000 MHz

Ver. A  
2021.11.28

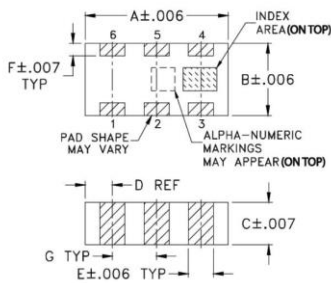
### Maximum Rating

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

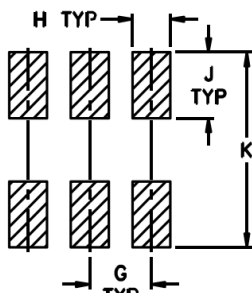
### Pin Connections

RF Input	1
RF Output	3
Ground	2,4,5,6

### Outline Drawing



### PCB Land Pattern

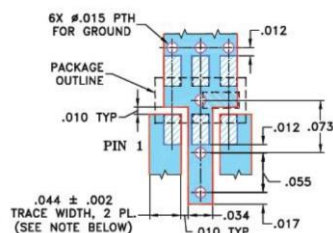


Suggested Layout,  
Tolerance to be within ±.002

### Outline Dimensions (inch/mm)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K	wt	
.039	.024	.042	.123	grams	
0.99	0.61	1.07	3.12	.020	

### Demo Board MCL P/N:TB-285 Suggested PCB Layout (PL-158)

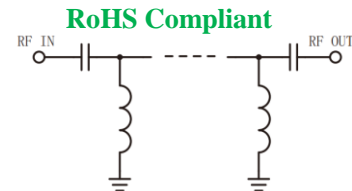
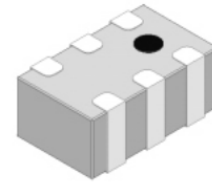


NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS: .020 ± .0015; COPPER: 1/2 OZ, EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

### 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

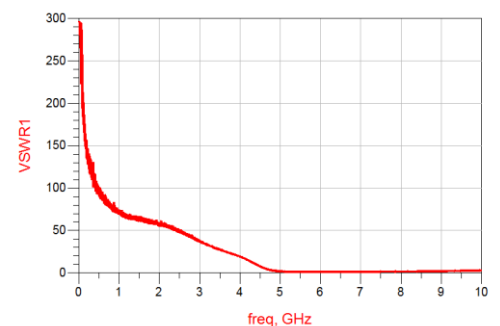
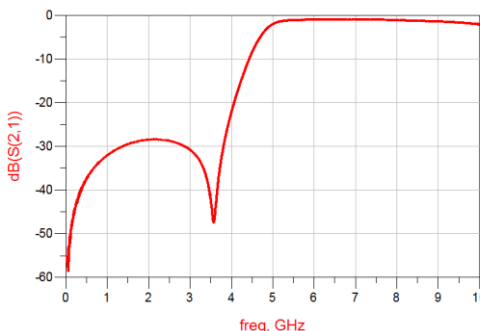
### Electrical Specifications<sup>(1)</sup> at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	5000-9000	-	1.7	2.0	dB
	Freq. Cut-off	4600	-	3.0	-	dB
	VSWR	5000-9000	-	1.4	2.0	:1
Stop Band	Rejection Loss	3700	25	-	-	dB
		3800	20	-	-	dB

(1) Tested on Demo Board.

### Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	54.90	294.08
1500	29.43	65.07
2470	28.66	49.55
3700	30.38	24.67
3800	30.29	22.41
4150	17.33	16.26
4380	11.14	10.59
4500	8.41	7.69
4600	6.50	5.70
4720	4.64	3.86
5000	2.00	1.79
5200	1.36	1.29
6800	1.21	1.37
8000	1.09	1.64
9000	1.41	2.13



a. The specifications are tested at 25°C±5°C, 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