

# Low Pass Filter

## WGLL-02180-1005

50Ω 1695 to 2180 MHz

Ver. A  
2021.9.17

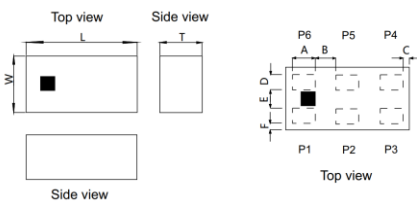
### Maximum Rating

Operating Temperature	-40°C~+85°C
Storage Temperature	-55°C~+125°C
RF Input Power	0.5W max at 25°C

### Pin Connections

RF Input	P6
RF Output	P4
Ground	P2,P5
No Connect	P1,P3

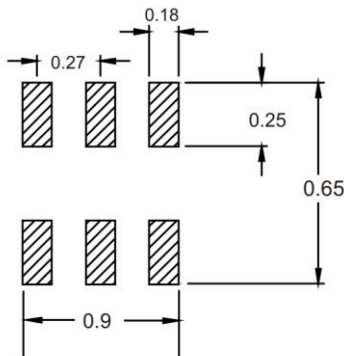
### Outline Drawing



### Outline Dimension(mm)

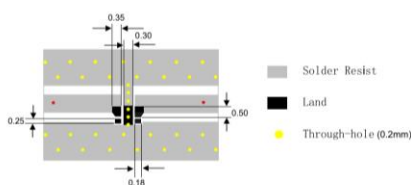
A	B	C	D	E
0.18± 0.05	0.18± 0.05	0.05± 0.05	0.125± 0.05	0.15± 0.05
F	L	W	T	
0.05± 0.05	1.0± 0.10	0.5± 0.10	0.50 max	

### PCB Land Pattern(mm)



Tolerance to be within ±0.02  
Solder Paste: SAC 305 Type is Recommended

### Demo Board Suggested PCB Layout



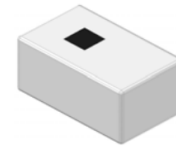
Don't connect NC pin (pin1 and pin3) to I/O or GND  
\*Line width should be designed to match 50 ohm characteristic impedance, depending on PCB material and thickness

### Features

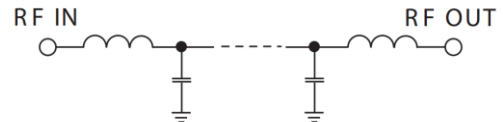
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

### Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use



RoHS Compliant



Functional Schematic

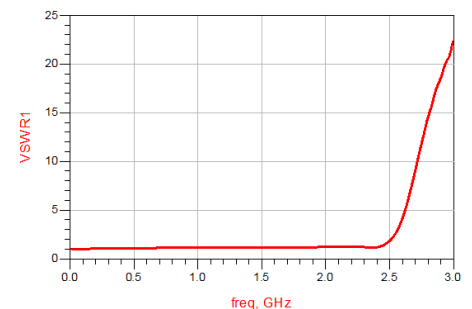
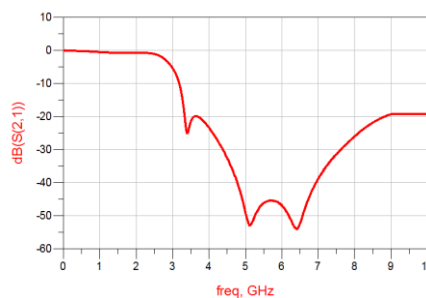
### Electrical Specifications<sup>(1)</sup> at 25°C

Parameter	Frequency (MHz)	MIN	Typ.	MAX	Unit	
Pass Band	Insertion Loss	1695-2180	-	0.75	1.15	dB
	Freq. Cut-off	2820	-	3.0	-	dB
	VSWR	1695-2180	-	1.7	2.0	:1
Stop Band	Rejection Loss	3350-4360	16	23	-	dB
		5085-6540	32	40	-	dB

(1) Tested on Demo Board.

### Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1000	0.47	1.59
1270	0.64	1.798
1690	0.78	1.826
2180	0.74	1.36
3000	5.39	5.82
3350	22.03	25.57
4360	29.59	73.25
5080	52.30	68.62
6100	48.34	63.73
6540	51.14	58.79
7000	38.70	53.67
7700	29.03	30.25
8000	25.93	25.99
8500	21.80	16.20
9000	19.25	11.75



### 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.