

# Low Pass Filter

# WGLL-01800-2012

50Ω DC to 1800 MHz

Ver. A  
2021.08.08

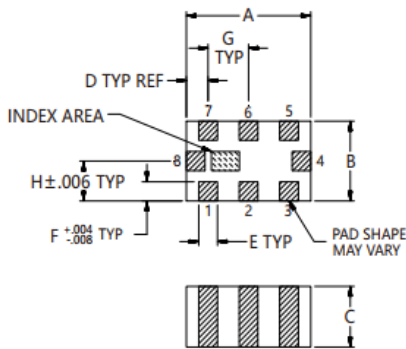
## Maximum Rating

Operating Temperature	-55°C~+125°C
Storage Temperature	-55°C~+125°C
RF Input Power	5.5W max at 25°C

## Pin Connections

RF Input	8
RF Output	4
Ground	1,2,3,5,6,7

## Outline Drawing

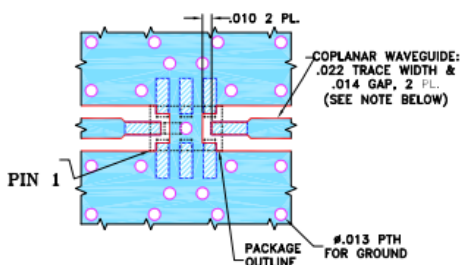


### Outline Dimensions (inch)

A	B	C	D	E	F	G	Wt.
.079	.049	.037	.014	.012	.012	.026	grams
2.00	1.25	0.95	0.35	0.30	0.30	0.65	.008

Note: Please refer to case style drawing for details

## Demo Board MCL P/N: CG-2012 Suggested PCB Layout



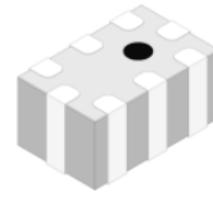
- NOTES:
- COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

## Features

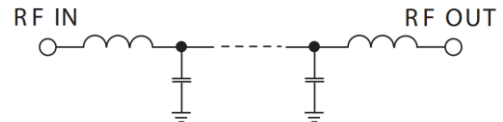
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure

## Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use



RoHS Compliant



Functional Schematic

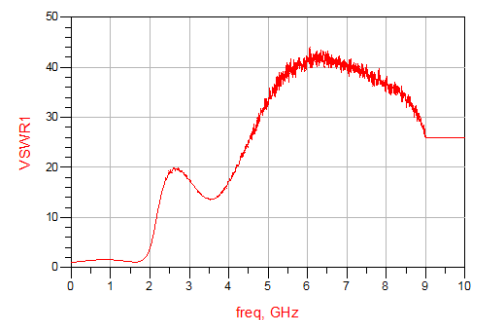
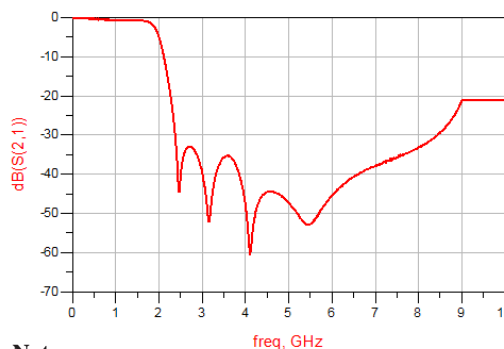
## Electrical Specifications<sup>(1)</sup> at 25°C

Parameter		Frequency (MHz)	MIN	Typ.	MAX	Unit
Pass Band	Insertion Loss	DC-1800	-	1.3	2.2	dB
	Freq. Cut-off	1925	-	3.0	-	dB
	VSWR	DC-1800	-	1.3	2.0	:1
Stop Band	Rejection Loss	2450-2900	20	-	-	dB
		2900-7000	25	35	-	dB
		7000-8500	20	30	-	dB
		10000	10	20	-	dB

(1) Test on our Demo Board.

## Typical Performance at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100	0.088	1.08
500	0.352	1.42
1000	0.633	1.55
1500	0.692	1.16
1800	1.38	1.43
1875	2.128	1.89
2000	5.1	3.84
2150	7.40	9.21
2450	12.28	18.23
2500	40.2	19.11
4000	48.32	17.15
6000	45.47	41.59
7200	36.95	40.21
8000	33.16	37.14
9000	21.20	25.91



## 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