

Low Pass Filter

WGLL-00530-2012

50Ω DC to 530 MHz

Ver. A
2022.03.16

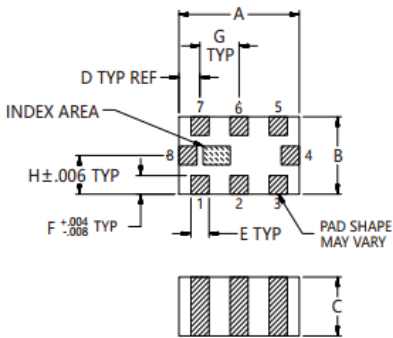
Maximum Rating

| | |
|-----------------------|------------------|
| Operating Temperature | -55°C~+125°C |
| Storage Temperature | -55°C~+125°C |
| RF Input Power | 3.5W max at 25°C |

Pin Connections

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

Outline Drawing

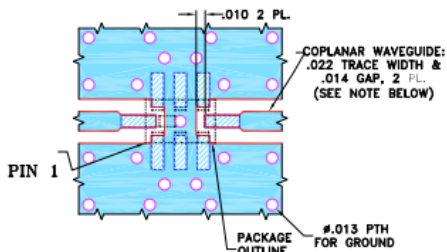


Outline Dimensions (inch)

| 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

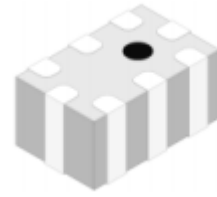
Demo Board MCL P/N: CG-2012 Suggested PCB Layout



- 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

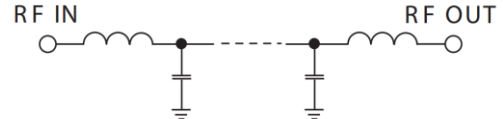
- High Performance
- Small Size
- Wide Band
- Ultra Low I.L.
- Temperature Stable
- LTCC Structure



RoHS Compliant

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use



Functional Schematic

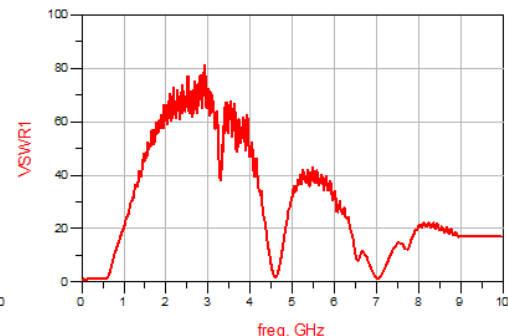
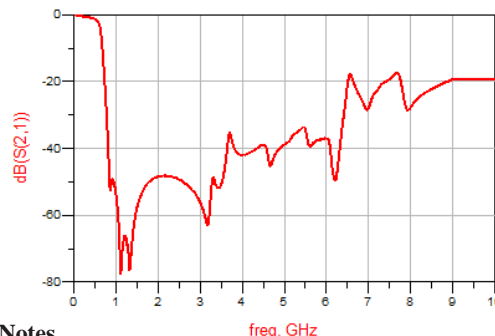
Electrical Specifications⁽¹⁾ at 25°C

| Parameter | | Frequency (MHz) | MIN | Typ. | MAX | Unit |
|-----------|----------------|-----------------|-----|------|-----|------|
| Pass Band | Insertion Loss | DC-530 | - | 1.5 | 2.0 | dB |
| | Freq. Cut-off | 601 | - | 3.0 | - | dB |
| | VSWR | DC-530 | - | 1.5 | - | :1 |
| Stop Band | Rejection Loss | 980-2600 | 30 | 50 | - | dB |
| | | 2600-4000 | - | 40 | - | dB |

(1) Tested on Demo Board.

Typical Performance at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 0.178 | 1.046 |
| 100 | 0.263 | 1.082 |
| 500 | 1.314 | 1.258 |
| 530 | 1.577 | 1.325 |
| 670 | 9.544 | 4.167 |
| 800 | 36.41 | 11.70 |
| 910 | 49.35 | 16.55 |
| 1000 | 54.03 | 20.58 |
| 1200 | 66.31 | 30.44 |
| 1500 | 57.56 | 45.69 |
| 1700 | 51.18 | 54.02 |
| 2500 | 49.34 | 70.92 |
| 3000 | 56.29 | 71.82 |
| 4000 | 41.93 | 47.27 |
| 6000 | 36.82 | 32.70 |



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