

Low Pass Filter

WGLL-01200-2012

50Ω DC to 1200 MHz

Ver. A
2024.11.05

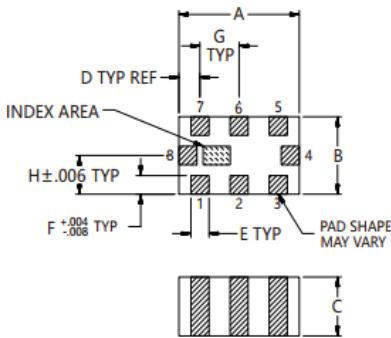
Maximum Rating

| | |
|-----------------------|------------------|
| 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

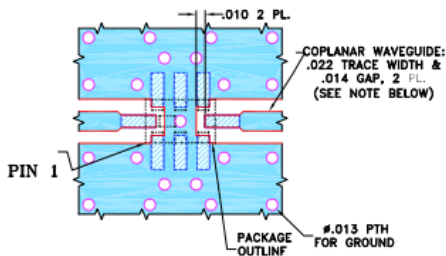


Outline Dimensions (inch)

| 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

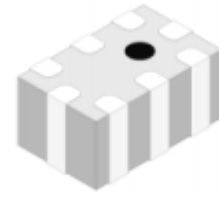
Demo Board MCL P/N: CG-2012 Suggested PCB Layout



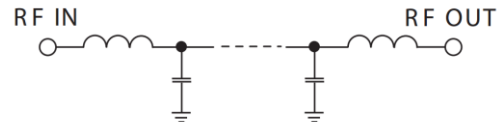
- NOTES:
- COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER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



RoHS Compliant



Functional Schematic

Application

- Harmonic Rejection
- Transmitters/Receivers
- Lab Use

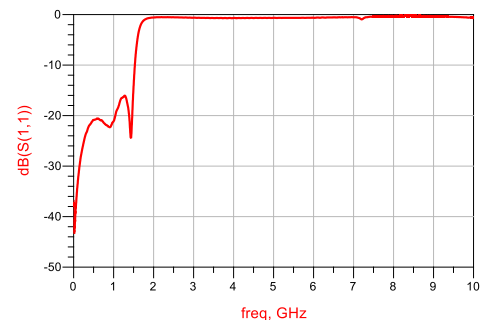
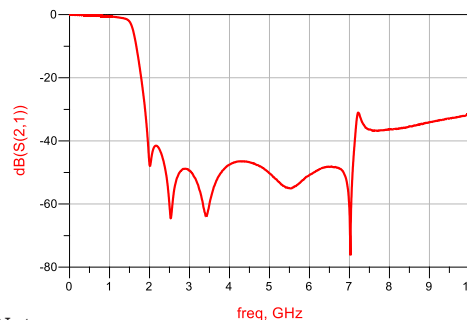
Electrical Specifications⁽¹⁾ at 25°C

| Parameter | | Frequency (MHz) | MIN | Typ. | MAX | Unit |
|-----------|----------------|-----------------|-----|------|-----|------|
| Pass Band | Insertion Loss | DC-1200 | - | 1.0 | 1.8 | dB |
| | Freq. Cut-off | 1470 | - | 3.0 | - | dB |
| | Return Loss | DC-1200 | - | 21 | - | dB |
| Stop Band | Rejection Loss | 1865-2000 | 20 | 45 | - | dB |
| | | 2000-3700 | 40 | 45 | - | dB |
| | | 3700-7000 | 28 | 40 | - | dB |
| | | 7000-10000 | - | 30 | - | dB |

(1) Tested on Demo Board.

Typical Performance at 25°C

| Frequency (MHz) | Insertion Loss (dB) | Return Loss (dB) |
|-----------------|---------------------|------------------|
| 100 | 0.105 | 33.49 |
| 1000 | 0.593 | 21.11 |
| 1200 | 0.868 | 16.51 |
| 1470 | 1.807 | 19.00 |
| 1690 | 11.54 | 1.839 |
| 1865 | 26.84 | 0.717 |
| 2000 | 47.59 | 0.580 |
| 3000 | 49.36 | 0.619 |
| 3700 | 51.79 | 0.674 |
| 5800 | 52.69 | 0.644 |
| 6000 | 50.84 | 0.622 |
| 7500 | 36.43 | 0.396 |
| 8500 | 35.32 | 0.313 |
| 9000 | 34.16 | 0.351 |
| 10000 | 31.61 | 0.667 |



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.



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