

Ceramic Low Pass Filter

LFCN-2600

50Ω DC⁽¹⁾ to 2600 MHz



Generic photo used for illustration purposes only

CASE STYLE: FV1206



Maximum Ratings

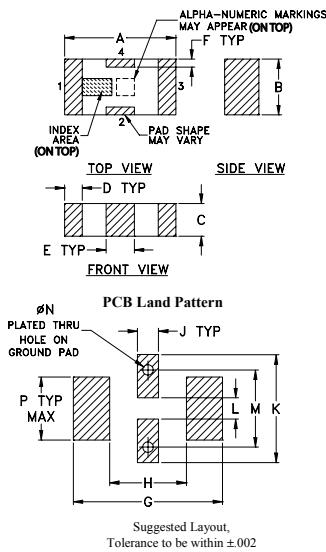
| | |
|-----------------------|------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 10W max. at 25°C |

* Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Pin Connections

| | |
|--------|-----|
| RF IN | 1 |
| RF OUT | 3 |
| GROUND | 2,4 |

Outline Drawing

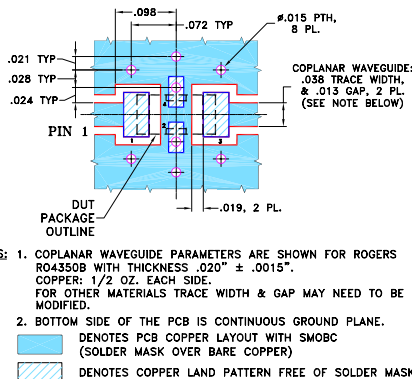


Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G |
|------|------|------|------|------|------|------|
| .126 | .063 | .037 | .020 | .032 | .009 | .169 |
| 3.20 | 1.60 | 0.94 | 0.51 | 0.81 | 0.23 | 4.29 |

| H | J | K | L | M | N | P | wt |
|------|------|------|------|------|------|------|-------|
| .087 | .024 | .122 | .024 | .087 | .012 | .071 | grams |
| 2.21 | 0.61 | 3.10 | 0.61 | 2.21 | 0.30 | 1.80 | .020 |

Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)



Features

- excellent power handling, 10W
- small size
- 7 sections
- temperature stable
- LTCC construction
- protected by U.S. Patent 6,943,646

Applications

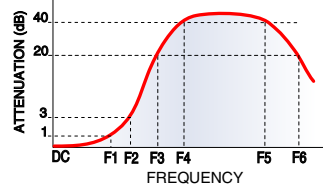
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

Electrical Specifications^(1,2) at 25°C

| Parameter | F# | Frequency (MHz) | Min. | Typ. | Max. | Unit | |
|-----------|----------------|-----------------|-----------|------|------|------|----|
| Pass Band | Insertion Loss | DC-F1 | DC-2600 | — | — | 1.2 | dB |
| | Freq. Cut-Off | F2 | 3125 | — | 3.0 | — | dB |
| | VSWR | DC-F1 | DC-2600 | — | 1.2 | — | :1 |
| Stop Band | Rejection Loss | F3 | 3750 | 20 | — | — | dB |
| | | F4-F5 | 3900-6600 | — | 30 | — | dB |
| | | F6 | 8400 | — | 20 | — | dB |
| | VSWR | F3-F6 | 3750-8400 | — | 20 | — | :1 |

(1) In Applications where DC isolation to ground is required, coupling capacitors are recommended to avoid DC leakage. Alternatively, if DC pass IN-OUT is required, Mini-Circuits "D" suffix version of this model will support DC IN-OUT, and provide >100 MOhm isolation to ground.
 (2) Measured on Mini-Circuits Characterization Test Board TB-270.

Typical Frequency Response

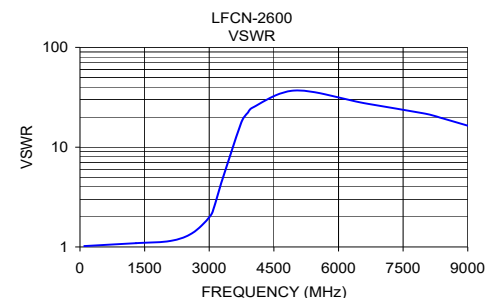
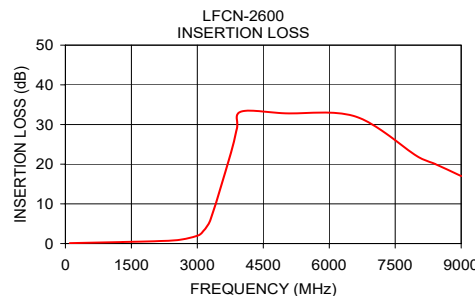


Electrical Schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 100.00 | 0.10 | 1.02 |
| 1300.00 | 0.39 | 1.09 |
| 2100.00 | 0.61 | 1.15 |
| 2600.00 | 0.94 | 1.37 |
| 3000.00 | 1.97 | 1.98 |
| 3125.00 | 3.02 | 2.60 |
| 3300.00 | 6.03 | 4.66 |
| 3750.00 | 22.35 | 17.93 |
| 3900.00 | 28.99 | 22.29 |
| 4000.00 | 33.27 | 24.83 |
| 5000.00 | 32.82 | 36.97 |
| 6600.00 | 32.00 | 27.59 |
| 8000.00 | 22.00 | 21.73 |
| 8400.00 | 20.08 | 19.54 |
| 9000.00 | 17.02 | 16.41 |



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

