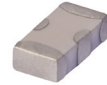


Ceramic

Low Pass Filter

50Ω DC⁽¹⁾ to 95 MHz

LFCN-95



CASE STYLE: FV1206

Available Tape and Reel at no extra cost

| Reel Size | Devices/Reel |
|-----------|-----------------------------------|
| 7" | 20, 50, 100, 200, 500, 1000, 3000 |

Maximum Ratings

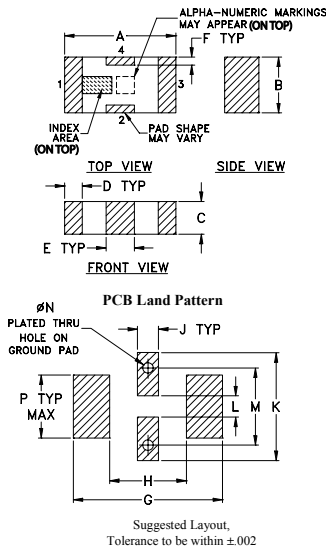
| | |
|-----------------------|-------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 8.5W max. at 25°C |

* 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 |

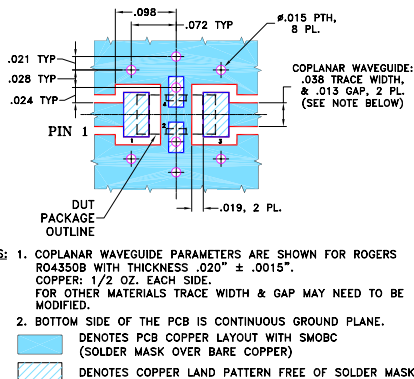
Outline Drawing



Outline Dimensions (inch)

| 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)



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-Circuits' 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

Features

- excellent power handling, 8.5W
- small size
- 7 sections
- temperature stable
- LTCC construction
- protected by U.S. Patent 6,943,646

Applications

- harmonic rejection
- VHF/UHF transmitters/receivers

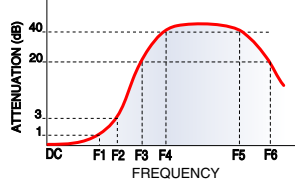
Electrical Specifications^(1,2) at 25°C

| Parameter | F# | Frequency (MHz) | Min. | Typ. | Max. | Unit | |
|-----------|----------------|-----------------|----------|------|------|------|----|
| Pass Band | Insertion Loss | DC-F1 | DC-95 | — | — | 1.0 | dB |
| | Freq. Cut-Off | F2 | 165 | — | 3.0 | — | dB |
| | VSWR | DC-F1 | DC-95 | — | 1.2 | — | :1 |
| Stop Band | Rejection Loss | F3 | 240 | 20 | — | — | dB |
| | | F4-F5 | 255-1600 | — | 40 | — | dB |
| | | F6 | 4500 | — | 20 | — | dB |
| | VSWR | F3-F6 | 240-4500 | — | 20 | — | :1 |

(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

(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) |
|-----------------|---------------------|-----------|
| 10.00 | 0.30 | 1.06 |
| 95.00 | 0.83 | 1.07 |
| 165.00 | 2.56 | 1.79 |
| 180.00 | 4.08 | 2.58 |
| 220.00 | 17.29 | 8.75 |
| 240.00 | 30.37 | 11.55 |
| 250.00 | 36.66 | 12.43 |
| 410.00 | 55.58 | 23.11 |
| 700.00 | 53.60 | 50.04 |
| 1235.00 | 44.98 | 76.58 |
| 1600.00 | 39.94 | 68.40 |
| 2000.00 | 33.54 | 63.70 |
| 2500.00 | 27.39 | 48.12 |
| 4500.00 | 20.96 | 24.63 |
| 5000.00 | 19.57 | 21.89 |

