

Ceramic Low Pass Filter

DC to 95 MHz

NEW!

LFCN-95



BLUE CELL™

CASE STYLE: FV1206

| Model | Price | Qty. |
|----------|--------|---------|
| LFCN-95 | \$3.99 | (10-49) |
| LFCN-95D | \$4.49 | (10-49) |

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 |
| DC Current Input to Output | 0.5A max. at 25°C |

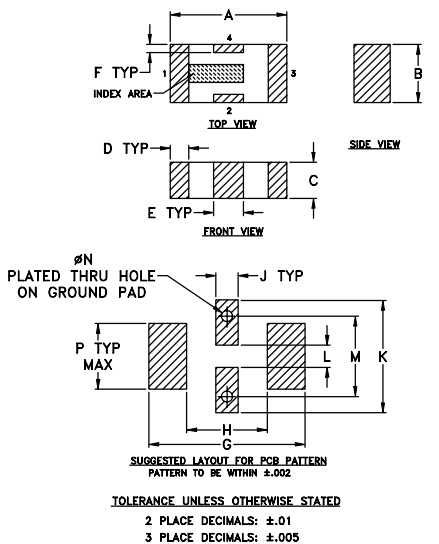
*Passband rating, derate linearly to 3.5W at 100°C ambient.

Pin Connections

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

**RF IN & RF OUT can be interchanged

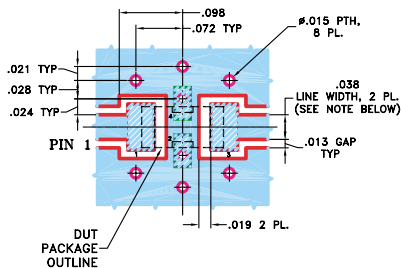
Outline Drawing



Outline Dimensions (inch)

| A | B | C | D | E | F | G | H | J | K | L | M | N | P | wt |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| .126 | .063 | .037 | .020 | .032 | .009 | .169 | .087 | .024 | .122 | .024 | .087 | .012 | .071 | grams |
| 3.20 | 1.60 | 0.94 | 0.51 | 0.81 | 0.23 | 4.29 | 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)



NOTE:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

- DENOTES PCB COPPER LAYOUT
- ▨ DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

Features

- excellent power handling, 8.5W
- small size
- 7 sections
- temperature stable
- patent pending

Applications

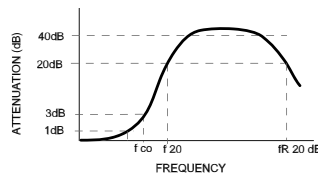
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

Low Pass Filter Electrical Specifications¹ (T_{AMB}=25°C)

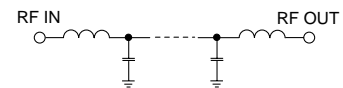
| MODEL NO. | PASSBAND (MHz) (loss < 1 dB) Max. | f _{co} , MHz Nom. (loss 3 dB) Typ. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|-----------|---|--|-------------------------------|------------|---------------------------|------------------|------------------|-----------------|
| | | | f 20 Min. | 40 Typ. | f _r 20 Typ. | Stopband Typ. | Passband Typ. | |
| LFCN-95 | DC-95 | 165 | 220 | 240-1600 | 4500 | 20 | 1.2 | 7 |

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-95D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

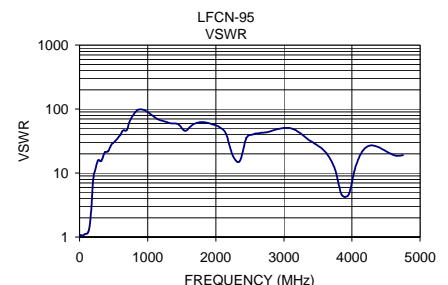
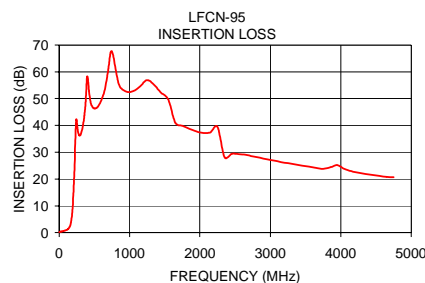


schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1.00 | 0.21 | 1.05 |
| 95.00 | 0.89 | 1.12 |
| 165.00 | 3.29 | 2.13 |
| 185.00 | 6.95 | 4.41 |
| 200.00 | 12.69 | 7.60 |
| 220.00 | 25.31 | 10.37 |
| 240.00 | 40.82 | 12.18 |
| 300.00 | 36.40 | 15.53 |
| 500.00 | 46.32 | 29.96 |
| 700.00 | 61.06 | 48.26 |
| 1050.00 | 52.77 | 82.73 |
| 1750.00 | 39.88 | 62.05 |
| 2750.00 | 28.46 | 43.44 |
| 3750.00 | 23.85 | 11.46 |
| 4750.00 | 20.64 | 19.11 |



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