

Ceramic Low Pass Filter

50Ω DC to 1700 MHz

LFTC-1700+
LFTC-1700



Maximum Ratings

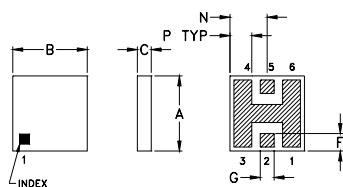
| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 125°C |

Pin Connections

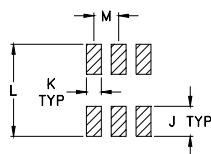
| | |
|--------|---------|
| RF IN | 2** |
| RF OUT | 5** |
| GROUND | 1,3,4,6 |

** RF IN & RF OUT can be interchanged

Outline Drawing



PCB Land Pattern

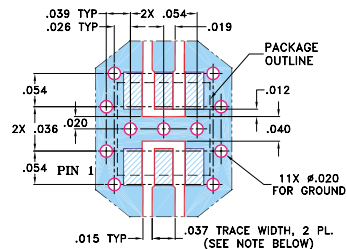


Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch)

| A | B | C | D | E | F | G | H |
|------|------|------|------|------|------|-------|----|
| .150 | .150 | .028 | -- | -- | .035 | .028 | -- |
| 3.81 | 3.81 | 0.71 | -- | -- | 0.89 | 0.71 | -- |
| J | K | L | M | N | P | wt | |
| .060 | .030 | .184 | .050 | .075 | .044 | grams | |
| 1.52 | 0.76 | 4.67 | 1.27 | 1.91 | 1.12 | 0.15 | |

Demo Board MCL P/N: TB-233 Suggested PCB Layout (PL-112)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; 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 WITH SMOBC (SOLDER MASK OVER BARE COPPER)
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- miniature size, 0.15"X0.15"X0.028"
- low profile, 0.028" height
- excellent power handling, 14W
- hermetically sealed

Applications

- harmonic rejection
- internal rejection
- receivers & transmitters

CASE STYLE: FR933
PRICE: \$3.75 ea. QTY. (10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

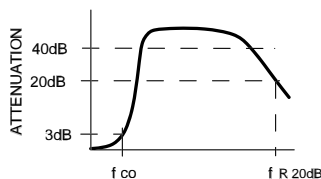
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications (T_{AMB}=25°C)

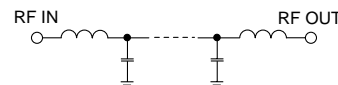
| PASSBAND (MHz) | f _{co} , MHz Nom. | STOP BAND (MHz) | | | VSWR (:1) Passband | POWER INPUT* (W) | MARKING | NO. OF SECTIONS |
|----------------|----------------------------|-----------------|----------------|---------|--------------------|------------------|---------|-----------------|
| (loss < 1 dB) | (loss 3 dB) | (> 20 dB) | (loss > 40 dB) | fr20 dB | Typ. | | | |
| Typ. | Typ. | | | Typ. | | | | |
| DC-1700 | 1980 | 2700 | 3300-3880 | 7200 | 1.2 | 14 | LF4 | 7 |

* Derate linearly to 6W at 100°C ambient.

typical frequency response

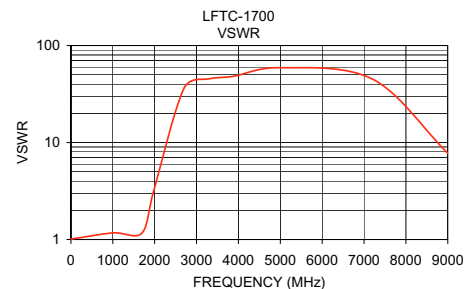
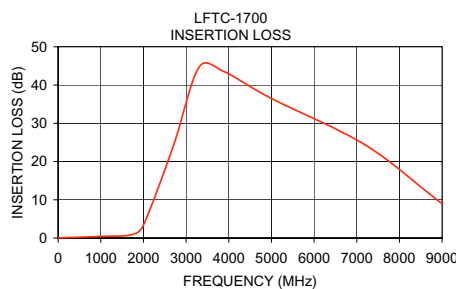


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1.00 | 0.04 | 1.01 |
| 1000.00 | 0.43 | 1.17 |
| 1700.00 | 0.82 | 1.17 |
| 1980.00 | 2.94 | 3.21 |
| 2700.00 | 24.07 | 36.29 |
| 3300.00 | 44.62 | 45.32 |
| 3880.00 | 43.57 | 48.21 |
| 5000.00 | 36.48 | 59.14 |
| 7200.00 | 24.33 | 45.18 |
| 9000.00 | 8.94 | 7.75 |



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M102713
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AD/YB/CP
060908