

Ceramic Low Pass Filter

DC to 320 MHz

NEW!

LFCN-320



BLUE CELL™

CASE STYLE: FV1206

| Model | Price | Qty. |
|-----------|--------|---------|
| LFCN-320 | \$2.99 | (10-49) |
| LFCN-320D | \$3.49 | (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 |

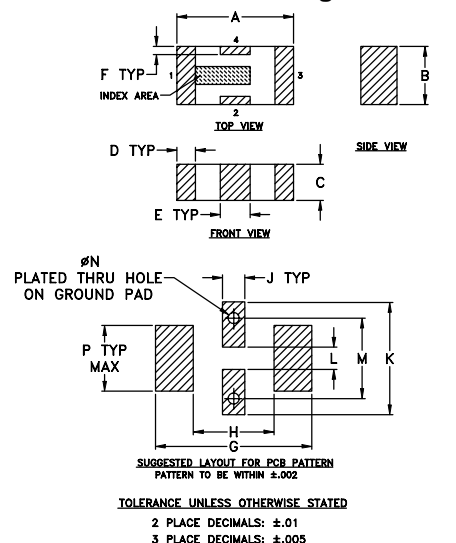
*Passband rating, derate linearly to 3.5W at 100°C ambient.

Pin Connections

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

** RF IN & RF OUT can be interchanged

Outline Drawing

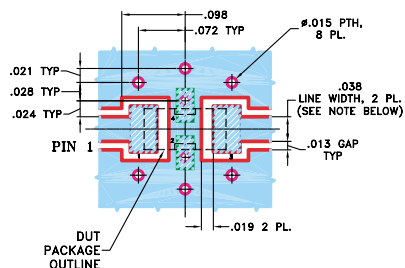


Outline Dimensions (inch)

| A | B | C | D | E | F | G | H |
|------|------|------|------|------|------|-------|------|
| .126 | .063 | .039 | .020 | .032 | .009 | .169 | .087 |
| 3.20 | 1.60 | 0.99 | 0.51 | 0.81 | 0.23 | 4.29 | 2.21 |
| J | K | L | M | N | P | wt. | |
| .024 | .122 | .024 | .087 | .012 | .071 | grams | |
| 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, 8.5W
- small size
- 7 sections
- temperature stable
- patent pending

Applications

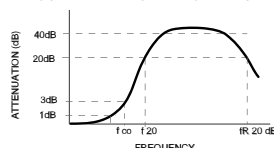
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

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

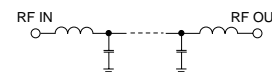
| MODEL NO. | PASSBAND (MHz) (loss < 1 dB) Max. | fco, MHz Nom. (loss 3 dB) Typ. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|-----------|---|---|-------------------------------|------------|---------------|------------------|------------------|-----------------|
| | | | f 20 Min. | 40 Typ. | fr 20 Typ. | Stopband Typ. | Passband Typ. | |
| LFCN-320 | DC-320 | 460 | 560 | 640-2500 | 5300 | 20 | 1.2 | 7 |

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-320D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

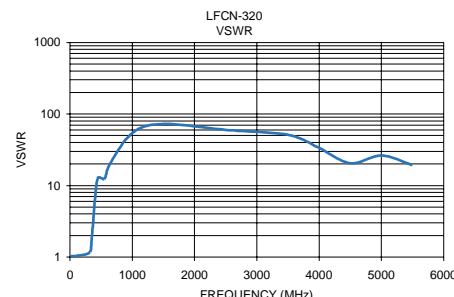
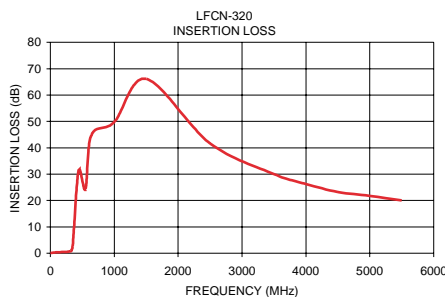


schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1.00 | 0.09 | 1.02 |
| 100.00 | 0.36 | 1.04 |
| 320.00 | 0.79 | 1.17 |
| 350.00 | .94 | 1.27 |
| 460.00 | 2.72 | 2.20 |
| 550.00 | 24.34 | 12.26 |
| 640.00 | 44.80 | 19.98 |
| 1000.00 | 49.75 | 54.29 |
| 1500.00 | 66.15 | 72.39 |
| 2500.00 | 41.71 | 59.91 |
| 3500.00 | 30.04 | 51.10 |
| 4000.00 | 26.30 | 33.42 |
| 4500.00 | 23.26 | 20.45 |
| 5000.00 | 21.80 | 26.33 |
| 5500.00 | 20.10 | 19.32 |



designers kit available

| Kit No. | No. of Units in Kit | Description | Price \$ per Kit |
|---------|---------------------|---|------------------|
| K1-LFCN | 35 | 5 of each: LFCN-225, -320, -400, -490, -530, -575, -630 | 99.95 |

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