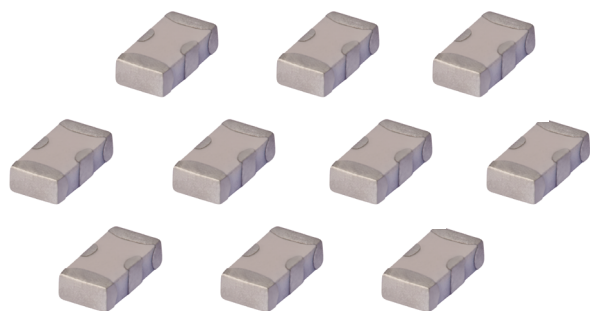




DESIGNER'S KIT K4-LFCN+

# Low Pass Filters

50Ω DC to 6700 MHz



## FEATURES

- Wideband, 50Ω
- LTCC Low Temperature Co-fired Ceramic
- Small size (L) 0.12" x (W) 0.06"
- Temperature stable
- Repeatable performance
- Excellent power handling
- Hermetically sealed
- Low cost

MINI-CIRCUITS DESIGNER'S KITS  
**SPEED UP**  
THE SOLUTION



## K4-LFCN+ ELECTRICAL SPECIFICATIONS

(kit includes 18 models, 5 of each, 90 total)

| Model      | Passband (MHz)<br>(loss < 1dB) <sup>1</sup><br>Max. | fco, (MHz)<br>Nom.<br>(loss 3dB)<br>Typ. | Stopband (MHz)<br>(loss, dB) |            |               | VSWR<br>(:1)     |                  | Power<br>Input <sup>2</sup> (W)<br>Max. | No. of<br>Sections |
|------------|-----------------------------------------------------|------------------------------------------|------------------------------|------------|---------------|------------------|------------------|-----------------------------------------|--------------------|
|            |                                                     |                                          | f 20<br>Min.                 | 30<br>Typ. | fr 20<br>Typ. | Stopband<br>Typ. | Passband<br>Typ. |                                         |                    |
| LFCN-800+  | DC-800                                              | 990                                      | 1400                         | 1500-2000  | 4500          | 20               | 1.2              | 9                                       | 5                  |
| LFCN-900+  | DC-850                                              | 1075                                     | 1275                         | 1350-4850  | 5100          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1000+ | DC-1000                                             | 1300                                     | 1550                         | 1900-5000  | 5500          | 20               | 1.3              | 10                                      | 7                  |
| LFCN-1200+ | DC-1200                                             | 1530                                     | 1865                         | 2000-5000  | 6200          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1325+ | DC-1325                                             | 1560                                     | 2100                         | 2200-2600  | 4250          | 20               | 1.4              | 9                                       | 5                  |
| LFCN-1400+ | DC-1400                                             | 1700                                     | 2015                         | 2100-6600  | 6800          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1450+ | DC-1450                                             | 1825                                     | 2025                         | 2050-6600  | 6700          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1500+ | DC-1500                                             | 1825                                     | 2100                         | 2150-6600  | 6800          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1525+ | DC-1525                                             | 1750                                     | 2040                         | 2120-6600  | 6700          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1575+ | DC-1575                                             | 1875                                     | 2175                         | 2225-6800  | 7100          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1700+ | DC-1700                                             | 2050                                     | 2375                         | 2500-6500  | 7000          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-1800+ | DC-1800                                             | 2125                                     | 2425                         | 2500-7200  | 8600          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-2000+ | DC-2000                                             | 2275                                     | 3000                         | 3100-3500  | 4600          | 20               | 1.3              | 9                                       | 5                  |
| LFCN-2250+ | DC-2200                                             | 2575                                     | 2900                         | 3000-5000  | 7200          | 20               | 1.2              | 10                                      | 7                  |
| LFCN-2400+ | DC-2400                                             | 2800                                     | 3600                         | 3700-4000  | 5000          | 20               | 1.2              | 9                                       | 5                  |
| LFCN-5000+ | DC-5000                                             | 5580                                     | 6850                         | 7050-10000 | 18000         | 20               | 1.2              | 9                                       | 7                  |
| LFCN-6000+ | DC-6000                                             | 6800                                     | 8500                         | 8700-10500 | 18000         | 20               | 1.3              | 9                                       | 7                  |
| LFCN-6700+ | DC-6700                                             | 7600                                     | 9300                         | 9500-11000 | 18000         | 20               | 1.3              | 9                                       | 7                  |

<sup>1</sup>LFCN-1700+, -2250+, -6000+, -6700+ Loss < 1.2dB, LFCN-800+, -900+, -1325+ Loss < 1.3dB, LFCN-2000+, -2400+ Loss < 1.5dB.

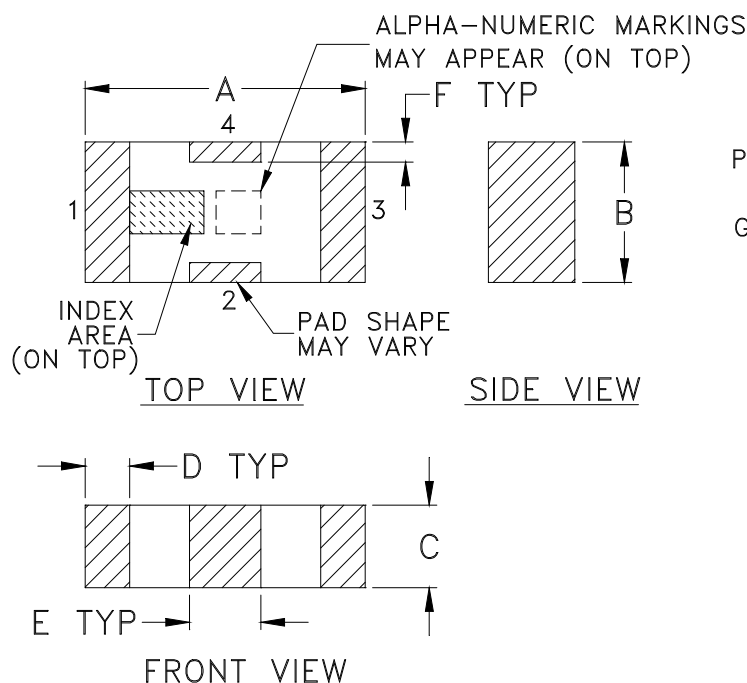
<sup>2</sup> Passband rating, at 100°C ambient derate linearly to 3.5W, 3W for LFCN-5000+, -6000+, -6700+, 4W for LFCN-800+, -1325+, -2000+, -2400+.



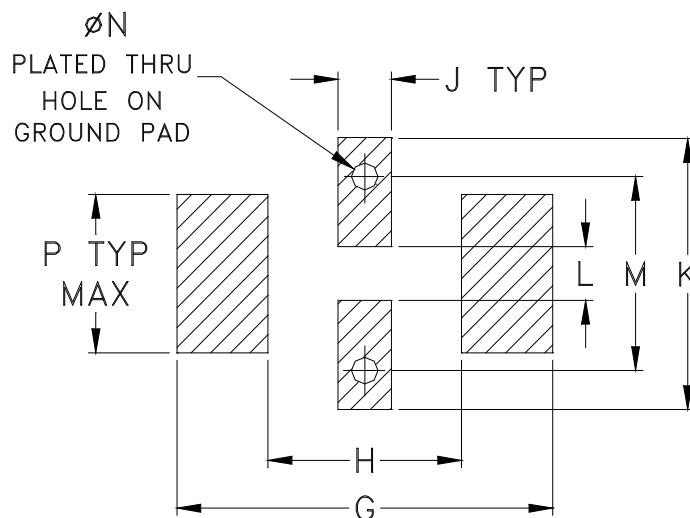
minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A  
ECO-007355  
K4-LFCN+  
MCL NY  
210323

### Outline Dimensions



### PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm .002$

| CASE # | A              | B              | C              | D              | E              | F              | G              | H              | J              | K              | L              | M              | N              | P              | WT. GRAM |
|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|
| FV1206 | .126<br>(3.20) | .063<br>(1.60) | .037<br>(0.94) | .020<br>(0.51) | .032<br>(0.81) | .009<br>(0.23) | .169<br>(4.29) | .087<br>(2.21) | .024<br>(0.61) | .122<br>(3.10) | .024<br>(0.61) | .087<br>(2.21) | .012<br>(0.30) | .071<br>(1.80) | .020     |

Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .01$ ; 3 Pl.  $\pm .005$

#### Notes:

- Open style, ceramic base.
- Termination finish: **as shown below or indicated on Data Sheet.**  
For RoHS Case Styles: Tin plate over Nickel plate. All models, (+) suffix.  
For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS

# Tape & Reel Packaging TR-F71

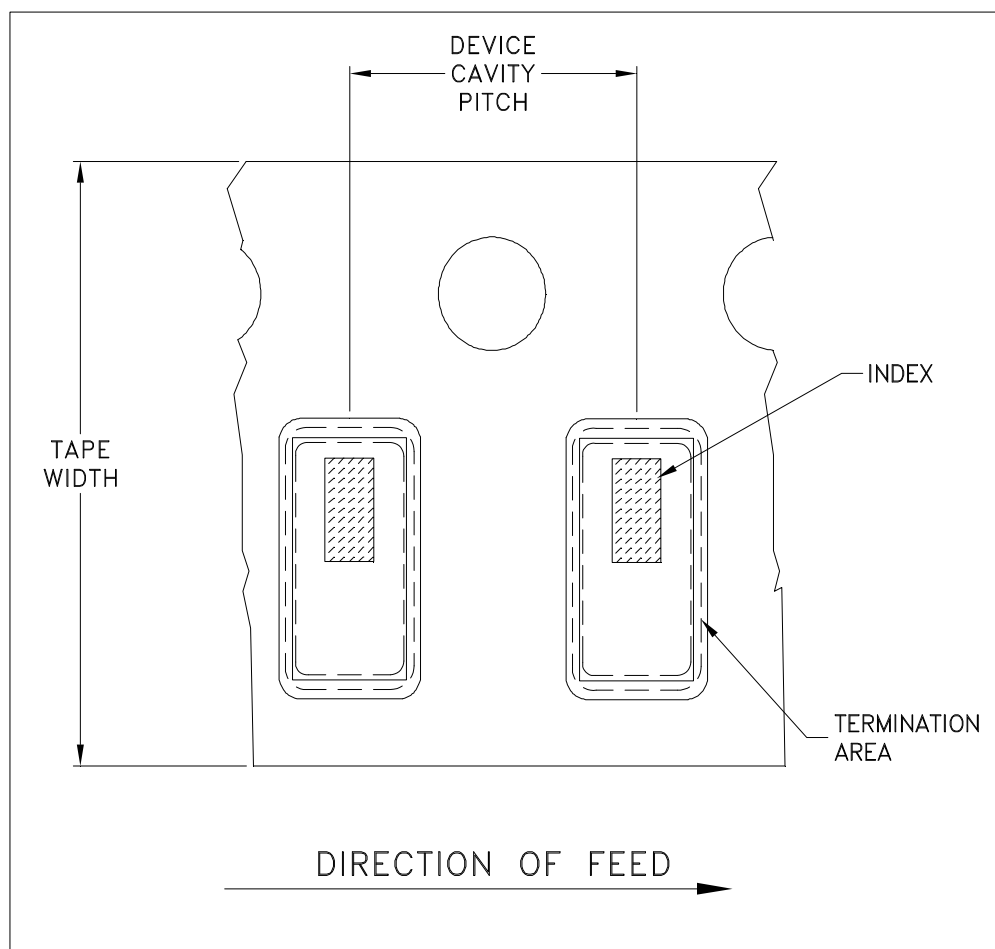


ILLUSTRATION 1

| Tape Width, mm | Device Cavity Pitch, mm | Reel Size, inches | Devices per Reel                    |      |
|----------------|-------------------------|-------------------|-------------------------------------|------|
| 8              | 4                       | 7                 | Small quantity standards (see note) | 20   |
|                |                         |                   |                                     | 50   |
|                |                         |                   |                                     | 100  |
|                |                         |                   |                                     | 200  |
|                |                         |                   |                                     | 500  |
|                |                         |                   |                                     | 1000 |
|                |                         |                   | Standard                            | 3000 |

Note: Please Consult individual model data sheet to determine device per reel availability.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: [www.minicircuits.com/pages/pdfs/tape.pdf](http://www.minicircuits.com/pages/pdfs/tape.pdf)



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From Mini-Circuits At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS