

Ceramic

# Low Pass Filter

**NEW!**

## LFCN-6700

DC to 6700 MHz



**BLUE CELL™**

CASE STYLE: FV1206

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C
DC Current Input to Output	0.5A max. at 25°C

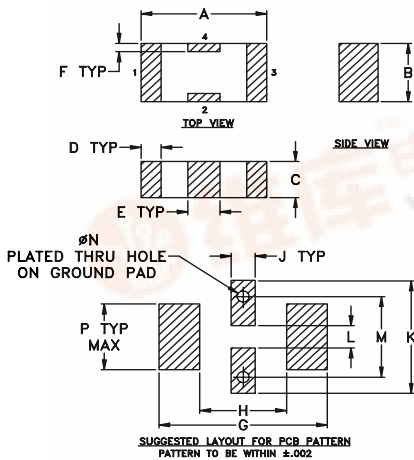
\*Passband rating, derate linearly to 3W at 100°C ambient.

### Pin Connections

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

\*\*RF IN & RF OUT can be interchanged

### Outline Drawing



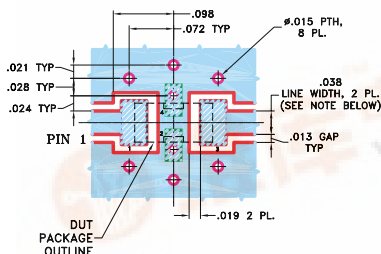
TOLERANCE UNLESS OTHERWISE STATED

- 2 PLACE DECIMALS: ±.01
- 3 PLACE DECIMALS: ±.005

### Outline Dimensions (inch/mm)

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)



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, 9W
- small size
- 7 sections
- temperature stable
- patent pending

### Applications

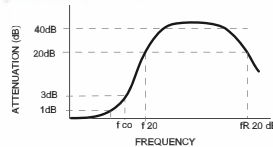
- harmonic rejection
- transmitters/receivers
- lab use

### Low Pass Filter Electrical Specifications<sup>1</sup> (T<sub>AMB</sub>=25°C)

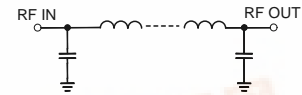
MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	30 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-6700	DC-6700	7600	9300	9500-12000	18000	20	1.3	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-6700D (DC Resistance to ground is 100 Mohms min.)

### typical frequency response

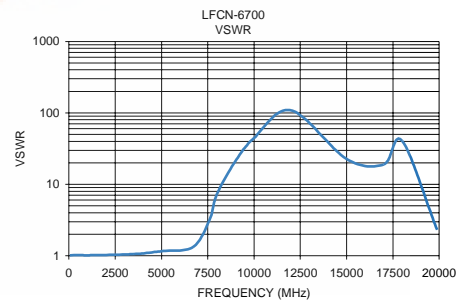
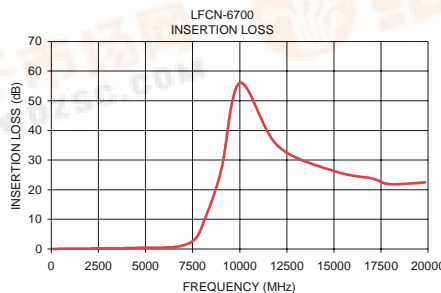


### schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50.00	0.03	1.01
500.00	0.08	1.02
1000.00	0.15	1.01
3500.00	0.25	1.05
5000.00	0.47	1.16
6700.00	0.79	1.32
7600.00	3.12	3.22
8000.00	7.62	7.34
9000.00	26.00	21.20
10000.00	55.95	44.55
12000.00	34.91	108.58
15000.00	26.32	22.58
17000.00	23.79	18.90
18000.00	21.88	40.41
19890.00	22.46	2.30



designers kit available

Kit No.	No. of Units in Kit	Description	Price \$ per Kit
K2-LFCN	60	5 of each: LFCN-800,-900,-1000,-1200,-1325,-1700,-2000,-2250,-2400,-5000,-6000,-6700	119.95

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

REV. C  
M96263  
LFCN-6700



**Mini-Circuits®**