

# Ceramic Low Pass Filter

DC to 400 MHz

**NEW!**  
**LFCN-400**



**BLUE CELL™**

CASE STYLE: FV1206

Model	Price	Qty.
LFCN-400	\$2.99	(10-49)
LFCN-400D	\$3.19	(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

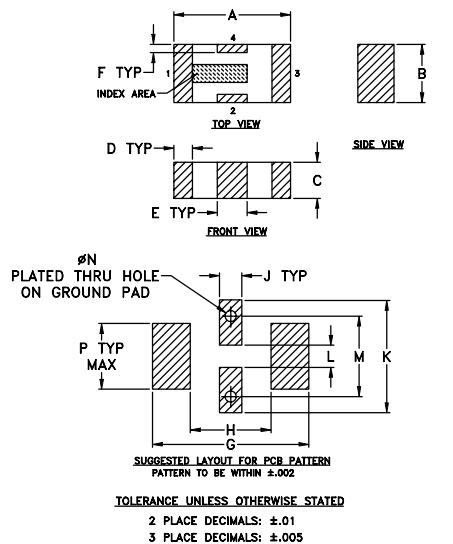
\*Passband rating, derate linearly to 3.5W at 100°C ambient.

## Pin Connections

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

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

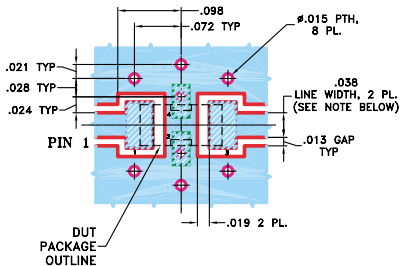
## Outline Drawing



## 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)**



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

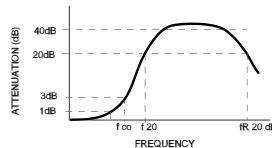
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

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

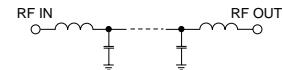
MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	40 Typ.	f <sub>r</sub> 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-400	DC-400	560	660	680-3000	5500	20	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-400D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

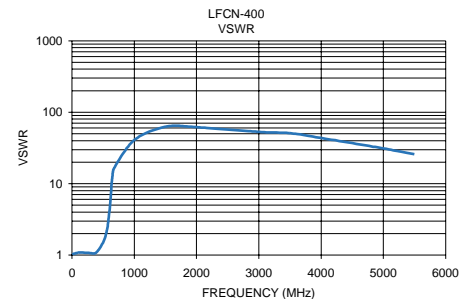
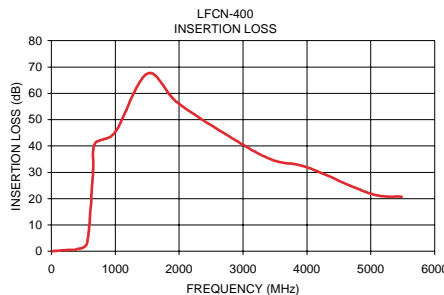


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.06	1.02
100.00	0.24	1.08
250.00	0.46	1.08
400.00	0.82	1.11
560.00	3.32	2.23
650.00	29.34	13.37
680.00	40.84	16.68
1000.00	45.29	40.90
1500.00	67.47	62.43
2000.00	55.97	61.67
3000.00	40.46	52.99
3500.00	34.35	50.78
4000.00	31.93	43.48
5000.00	21.90	31.07
5500.00	20.67	25.87



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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