

# Ceramic Low Pass Filter

DC to 1400 MHz

**NEW!**

**LFCN-1400**



**BLUE CELL™**

CASE STYLE: FV1206

Model	Price	Qty.
LFCN-1400	\$2.99	(10-49)
LFCN-1400D	\$3.49	(10-49)

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C
DC Current Input to Output	0.5A max. at 25°C

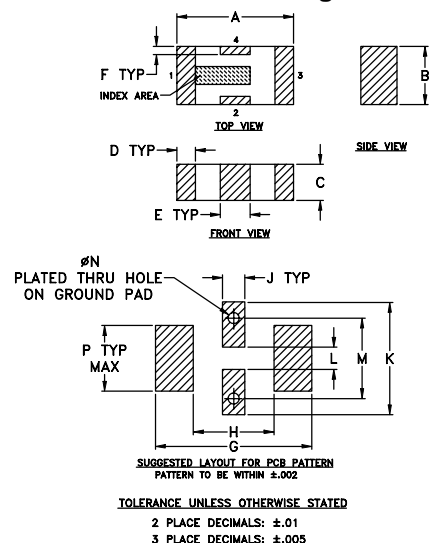
\*Passband rating, derate linearly to 3.5W at 100°C ambient.

## Pin Connections

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

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

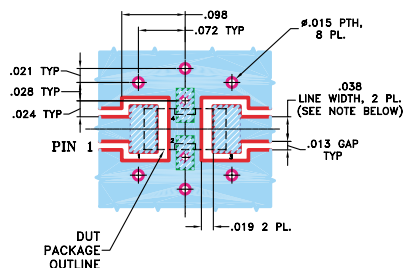
## Outline Drawing



## Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
.126	.063	.037	.020	.032	.009	.169	.087	.024	.122	.024	.087	.012	.071	grams
3.20	1.60	0.94	0.51	0.81	0.23	4.29	2.21	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)**



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, 10W
- small size
- 7 sections
- temperature stable
- patent pending

## Applications

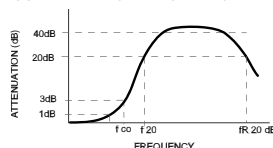
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

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

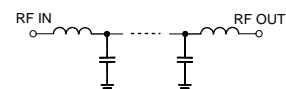
MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	fco, MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	30 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-1400	DC-1400	1700	2015	2100-6600	6800	20	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-1400D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

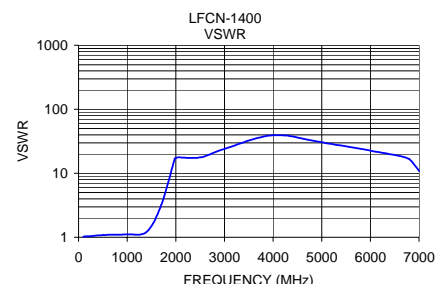
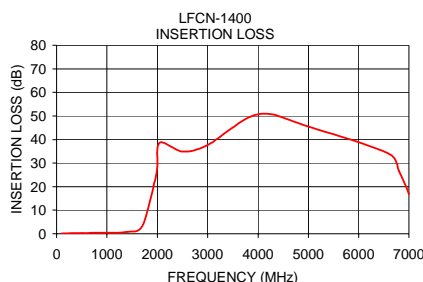


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.11	1.02
500.00	0.24	1.08
1000.00	0.41	1.11
1400.00	0.72	1.22
1700.00	3.20	3.20
1975.00	24.77	16.89
2000.00	28.65	17.39
2050.00	38.72	17.75
2500.00	34.93	17.75
3000.00	37.62	24.14
4000.00	50.70	39.49
5000.00	45.47	30.49
6600.00	34.00	18.70
6800.00	26.51	16.56
7000.00	16.88	10.89



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