

Ceramic

# Low Pass Filter

DC to 900 MHz

NEW!

LFCN-900



BLUE CELL™

CASE STYLE: FV1206

## 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

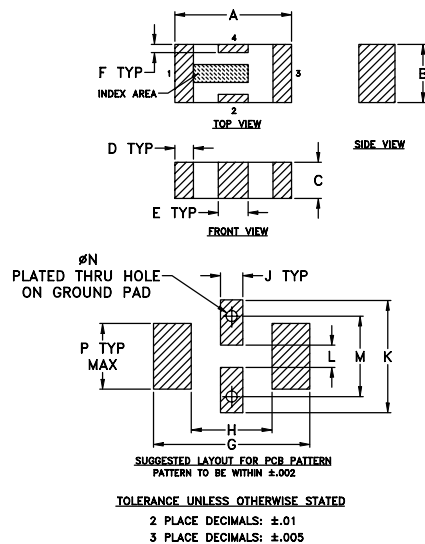
\*Passband rating, derate linearly to 3.5W at 100°C ambient.

## Pin Connections

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

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

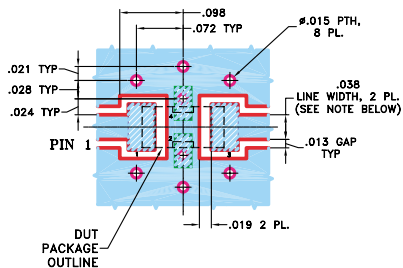
## Outline Drawing



## 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, 10W
- small size
- 7 sections
- temperature stable
- rejection in stopband, 45-50 dB typ.
- patent pending

## Applications

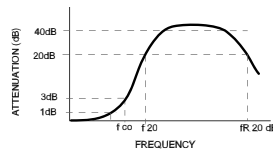
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

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

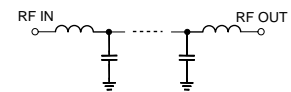
MODEL NO.	PASSBAND (MHz) (loss <1.3 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	30 Typ.	f <sub>r</sub> 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-900	DC-900	1075	1275	1350-5000	5300	20	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-900D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

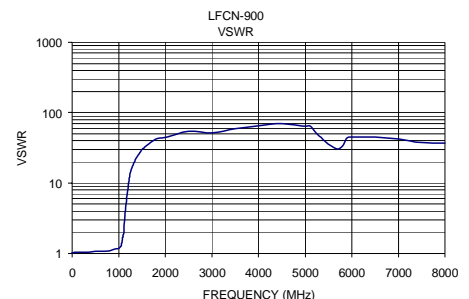
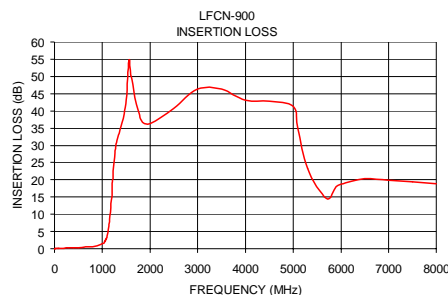


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.14	1.04
500.00	0.35	1.06
1000.00	1.43	1.18
1075.00	2.52	1.48
1280.00	28.98	16.14
1360.00	33.79	21.44
1500.00	43.23	29.64
1600.00	50.48	34.26
3000.00	46.30	52.05
4000.00	43.04	64.96
5000.00	41.28	64.28
5300.00	23.36	47.10
6000.00	18.72	44.99
7000.00	19.93	41.97
8000.00	18.92	36.91



## 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

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