

Ceramic Low Pass Filter

DC to 225 MHz

NEW!
LFCN-225



BLUE CELL™

CASE STYLE: FV1206
PRICE: \$ 2.99 ea. QTY (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

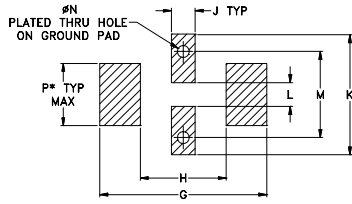
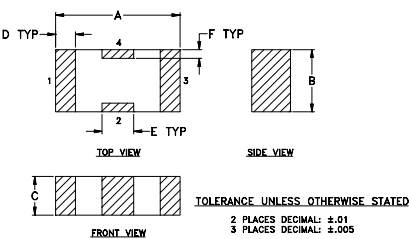
*Passband rating, derate linearly to 3.5W at 100°C ambient.

Pin Connections

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

**RF IN & RF OUT can be interchanged

Outline Drawing



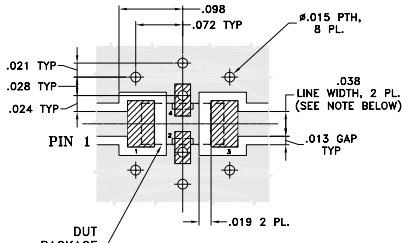
SUGGESTED LAYOUT FOR PCB PATTERN
PATTERN TO BE WITHIN ±.002

* LINE WIDTH SHOULD BE DESIGNED TO MATCH 50 OHMS CHARACTERISTIC IMPEDANCE, DEPENDING ON PCB MATERIAL & THICKNESS.

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

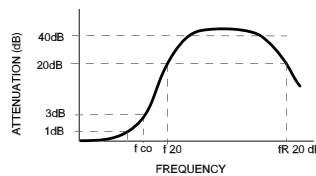
Applications

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

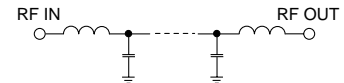
Low Pass Filter Electrical Specifications (T_{AMB}=25°C)

MODEL NO.	PASSBAND (MHz) (loss < 1 dB) Max.	f _{co} , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	40 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-225	DC-225	350	460	510-2500	5500	20	1.2	7

typical frequency response

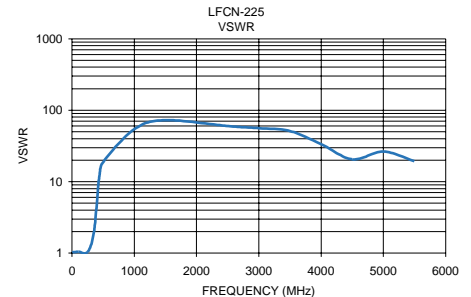
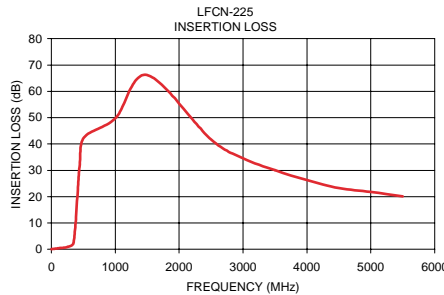


schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.09	1.02
100.00	0.36	1.04
250.00	0.89	1.03
350.00	2.70	1.91
440.00	31.16	12.52
510.00	42.44	19.32
1000.00	49.75	54.29
1500.00	66.15	72.39
2500.00	41.71	59.91
3000.00	34.59	56.04
3500.00	30.04	51.10
4000.00	26.30	33.42
4500.00	23.26	20.45
5000.00	21.80	26.33
5500.00	20.10	19.32



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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