

# Ceramic Low Pass Filter

50Ω DC to 630 MHz

LFCN-630+  
LFCN-630



## 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

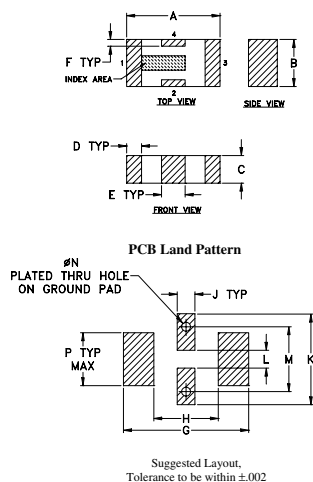
\* Passband rating, derate linearly to 3.5W at 100°C ambient.

## Pin Connections

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

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

## Outline Drawing



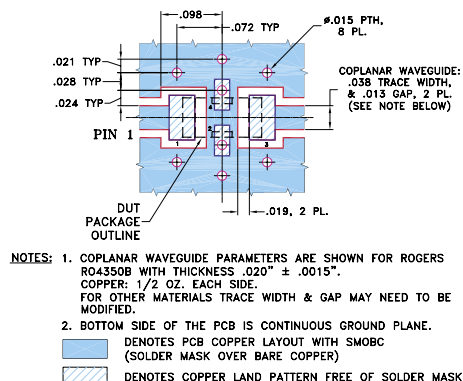
## Outline Dimensions (inch)

A	B	C	D	E	F	G
.126	.063	.037	.020	.032	.009	.169
3.20	1.60	0.94	0.51	0.81	0.23	4.29

H	J	K	L	M	N	P	wt
.087	.024	.122	.024	.087	.012	.071	grams
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)



## Features

- excellent power handling, 8.5W
- small size
- 7 sections
- temperature stable
- protected by U.S. Patent 6,943,646

## Applications

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

CASE STYLE: FV1206

Model	Price	Qty.
LFCN-630+	\$2.99	(10-49)
LFCN-630	\$2.99	(10-49)
LFCN-630D+	\$3.49	(10-49)
LFCN-630D	\$3.49	(10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

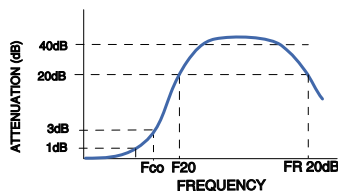
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

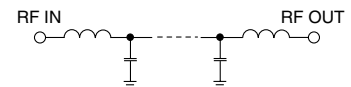
PASSBAND (MHz)  (loss < 1.2 dB)	fco, MHz Nom.  (loss 3 dB)	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20	40	FR 20	Stopband	Passband	
		Min.	Typ.	Typ.	Typ.	Typ.	
DC-630	830	1000	1050-3500	6000	20	1.2	7

1. For applications requiring DC voltage to be applied to the Input or output, use LFCN-630D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

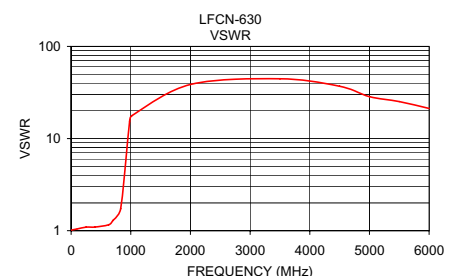
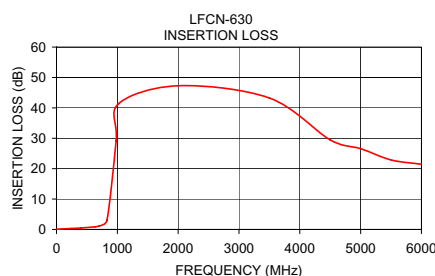


## electrical schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.05	1.01
100.00	0.18	1.04
250.00	0.33	1.09
400.00	0.48	1.10
630.00	0.88	1.16
700.00	1.16	1.29
830.00	2.99	1.73
980.00	29.14	15.39
1020.00	41.38	17.75
2000.00	47.29	38.61
3500.00	43.24	44.55
4500.00	29.47	36.97
5000.00	26.58	28.49
5500.00	22.87	25.19
6000.00	21.45	21.20



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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M101108  
LFCN-630  
EDR-6588/7  
RVN/AD/CP/AM  
060912