

Ceramic Low Pass Filter

50Ω DC to 2400 MHz

LFCN-2400+ LFCN-2400



Maximum Ratings

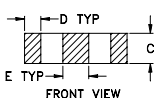
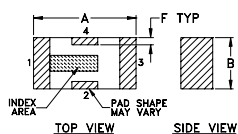
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C
DC Current Input to Output	1A max. at 25°C

* Passband rating, derate linearly to 4W at 100°C ambient.

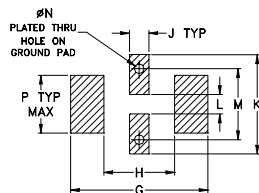
Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



PCB Land Pattern



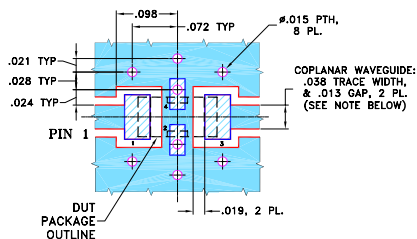
Suggested Layout, Tolerance to be within ±.002

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)



- NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

- excellent power handling, 9W
- small size
- 5 sections
- temperature stable
- hermetically sealed

Applications

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

CASE STYLE: FV1206

Model	Price	Qty.
LFCN-2400+	\$1.99	(10-49)
LFCN-2400	\$1.99	(10-49)
LFCN-2400D+	\$2.49	(10-49)
LFCN-2400D	\$2.49	(10-49)

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

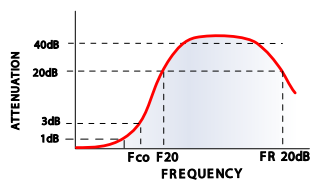
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications¹ (T_{AMB} = 25°C)

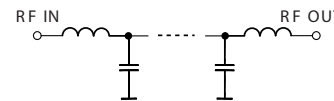
PASSBAND (MHz) (loss < 1.5 dB)	f _{co} , MHz Nom. (loss 3 dB)	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20	30	FR 20	Stopband	Passband	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
DC-2400	2800	3600	3700-4000	5000	20	1.2	5

1. For applications requiring DC voltage to be applied to the Input or output, use LFCN-2400D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

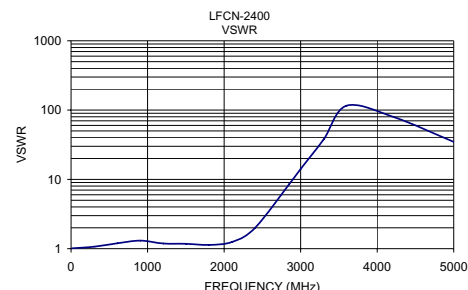
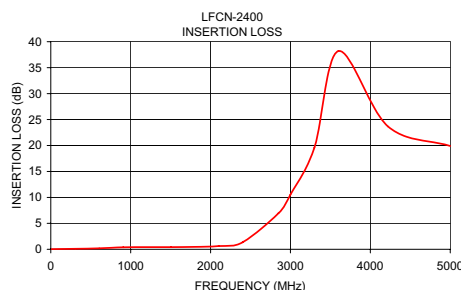


electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10.00	0.03	1.01
308.75	0.10	1.07
607.50	0.20	1.20
906.25	0.39	1.31
1205.00	0.41	1.19
1503.75	0.41	1.17
1802.50	0.46	1.13
2101.25	0.62	1.25
2400.00	1.34	1.97
2850.00	6.94	8.51
3000.00	10.53	14.15
3300.00	19.58	37.77
3600.00	38.18	115.81
4222.22	23.66	78.97
5000.00	19.90	34.75



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IF/RF MICROWAVE COMPONENTS

REV. J
M121640
LFCN-2400
ED-9913/5
AD/CP/AM
090218