

Ceramic Low Pass Filter

LFCN-4400+ LFCN-4400

50Ω DC to 4400 MHz

Maximum Ratings

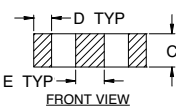
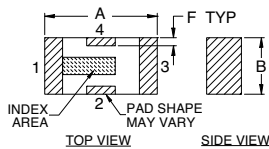
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W at 25°C
DC Current Input to Output	0.5A max. at 25°C

*Passband rating, derate linearly to 3 W at 100°C ambient

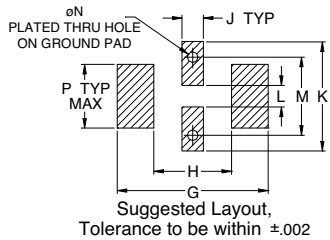
Pin Connections

RF IN	1
RF OUT	3
GROUND	2, 4

Outline Drawing



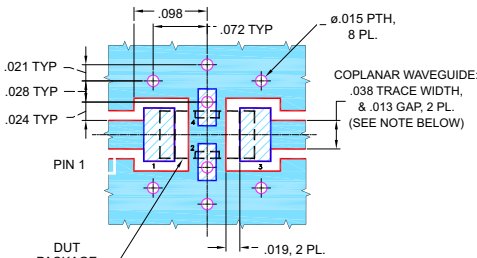
PCB Land Pattern



Outline Dimensions (inch/mm)

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)



NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350B 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, 8W
- small size
- 7 sections
- temperature stable
- protected by US Patent 6,943,646

Applications

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



CASE STYLE: FV1206

Model	Price	Qty.
LFCN-4400+	\$2.99	(10-49)
LFCN-4400	\$2.99	(10-49)
LFCN-4400D+	\$3.49	(10-49)
LFCN-4400D	\$3.49	(10-49)

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

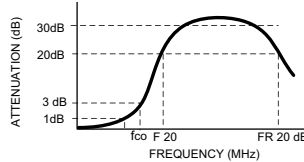
The + Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

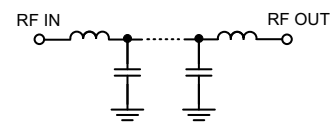
PASSBAND (MHz) (loss < 1 dB) Max.	f _{co} , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20 Min.	30 Typ.	FR 20 Typ.	Stopband Typ.	Passband Typ.	
DC-4400	5290	6700	6280-9800	13000	17	1.2	7

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-4400D (DC Resistance to ground is 100 Mohms min.)

typical frequency response

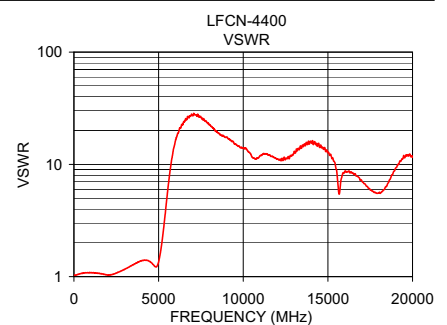
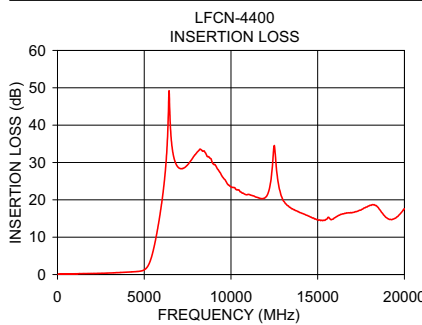


schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.04	1.03
320	0.12	1.06
1340	0.24	1.08
3740	0.57	1.33
4400	0.75	1.39
5170	1.98	1.88
5290	2.99	2.62
5580	7.66	6.63
5860	14.61	13.09
6280	31.47	21.20
6700	31.52	26.33
7400	28.90	26.33
9800	24.24	14.26
13000	19.94	12.80
20000	17.61	11.53



designers kit available

Kit No.	No. of Units in Kit	Description	Price \$ per Kit
K5-LFCN+	65	5 of each: LFCN-2000,-2250,-2400,-2500,-2600,-2750,-2850,-3000,-3800,-4400,-5000,-6000,-6700 (RoHS compliant)	129.95



minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

IF/RF MICROWAVE COMPONENTS

REV. C
M121640
EDR-8076
LFCN-4400
RAV
080223
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