

Ceramic Low Pass Filter

50Ω DC⁽¹⁾ to 4400 MHz

LFCN-4400+ LFCN-4400



CASE STYLE: FV1206
PRICE: \$2.99 ea. QTY (20)

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

Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 3000

Maximum Ratings

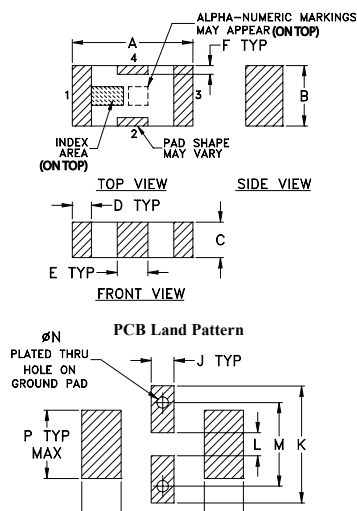
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W max. at 25°C

* Passband rating, derate linearly to 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

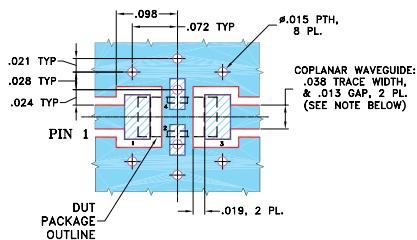
Outline Drawing



Outline Dimensions (inch/mm)

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:
- 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.
 - 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
- hermetically sealed
- LTCC construction
- protected by U.S. Patent 6,943,646

Applications

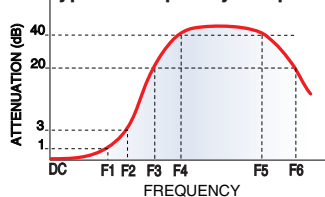
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

Electrical Specifications⁽¹⁾ at 25°C

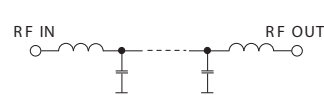
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-4400	—	—	1
	Freq. Cut-Off	F2	5290	—	3.0	dB
	VSWR	DC-F1	DC-4400	—	1.2	:1
Stop Band	Rejection Loss	F3	6700	20	—	dB
		F4-F5	6280-9800	—	30	dB
		F5-F6	9800-13000	—	20	dB
		F3-F6	6700-13000	—	17	:1

(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Frequency Response

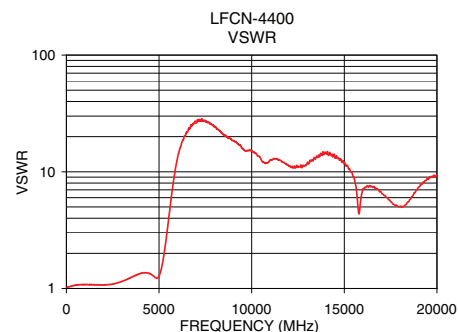
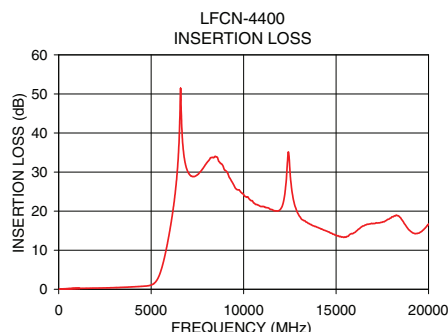


Electrical Schematic



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



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For detailed performance specs & shopping online see web site

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Page 1 of 1