

# Ceramic Low Pass Filter

50Ω DC to 4000 MHz

## LFTC-4000+ LFTC-4000



### Maximum Ratings

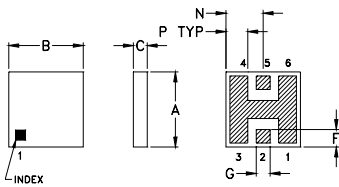
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 125°C

### Pin Connections

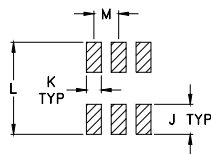
RF IN	2**
RF OUT	5**
GROUND	1,3,4,6

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

### Outline Drawing



### PCB Land Pattern

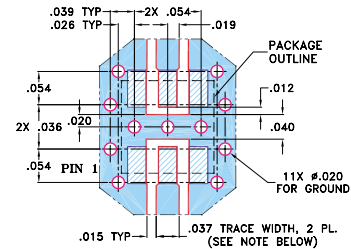


Suggested Layout,  
Tolerance to be within ±.002

### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.150	.150	.028	--	--	.035	.028	--
3.81	3.81	0.71	--	--	0.89	0.71	--
J	K	L	M	N	P	wt	
.060	.030	.184	.050	.075	.044	grams	
1.52	0.76	4.67	1.27	1.91	1.12	0.15	

### Demo Board MCL P/N: TB-233 Suggested PCB Layout (PL-112)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; 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 WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

### Features

- miniature size, 0.15"X0.15"X0.028"
- low profile, 0.028" height
- excellent power handling, 10W
- hermetically sealed

### Applications

- harmonic rejection
- internal rejection
- receivers & transmitters

CASE STYLE: FR933  
PRICE: \$3.75 ea. QTY. (10-49)

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

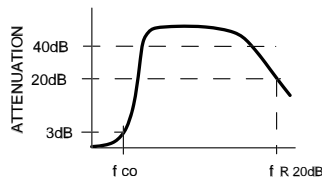
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

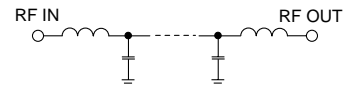
PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOP BAND (MHz)	fr20 dB	VSWR (:1) Passband	POWER INPUT* (W)	MARKING	NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	( > 20 dB)	Typ.	Typ.			
DC-4000	5325	7250	9500	1.2	10	LF10	7

\* Derate linearly to 4W at 100°C ambient.

### typical frequency response

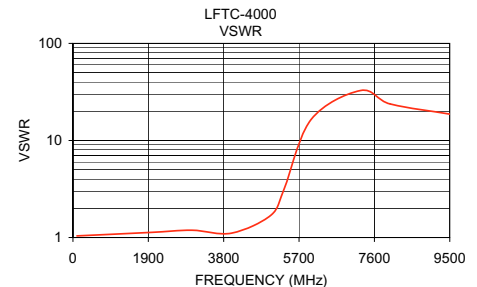
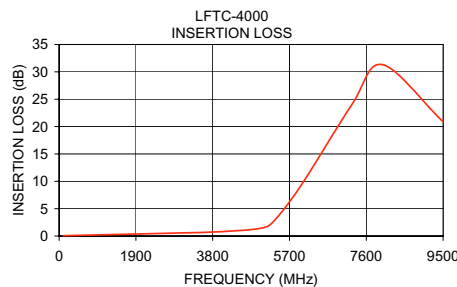


### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.06	1.04
2000.00	0.39	1.13
3000.00	0.57	1.19
4000.00	0.79	1.11
5000.00	1.44	1.71
5325.00	2.83	3.18
6000.00	9.41	16.39
7250.00	24.10	32.71
8000.00	31.32	23.73
9500.00	20.89	18.69



**Mini-Circuits®**  
ISO 9001 ISO 14001 CERTIFIED

ALL NEW  
**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



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS

REV. F  
M102713  
LFTC-4000  
EDB-020612  
AD/YB/CP  
061229