

# Ceramic Low Pass Filter

50Ω DC to 5400 MHz

## LFTC-5400+



### Maximum Ratings

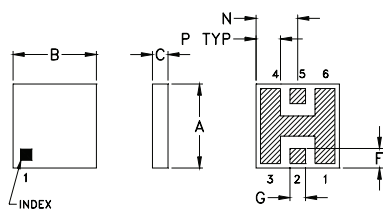
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 125°C

Permanent damage may occur if any of these limits are exceeded.

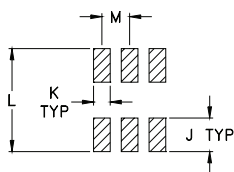
### Pin Connections

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

### Outline Drawing



### PCB Land Pattern

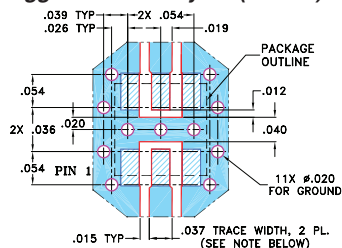


Suggested Layout,  
Tolerance to be within ±0.02

### 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, 19W
- 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)

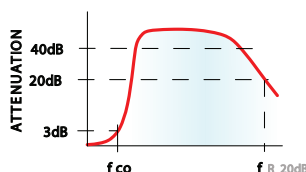
The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

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

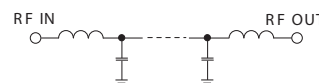
PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOP BAND (MHz)	fr20 dB	VSWR (:1) Passband	POWER INPUT* (W)	MARKING	NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	( > 20 dB)	Typ.	Typ.			
DC-5400	6410	9000-11000	12000	1.1	19	LF5	7

\* Derate linearly to 8W at 100°C ambient.

### typical frequency response

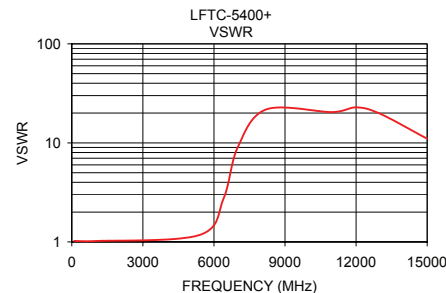
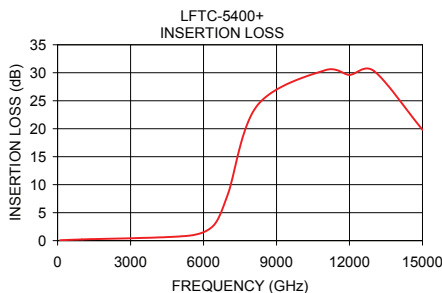


### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
100.00	0.07	1.02
1000.00	0.21	1.02
5400.00	0.88	1.18
6410.00	2.69	2.76
7000.00	8.27	8.99
8200.00	24.11	21.73
11000.00	30.45	20.45
12000.00	29.61	22.87
13000.00	30.32	19.76
15000.00	19.81	11.03



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IF/RF MICROWAVE COMPONENTS

REV. M  
M121640  
LFTC-5400+  
EDB-020540  
AD/YB/CP  
090218