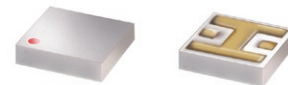


# Ceramic Low Pass Filter

50Ω DC to 2000 MHz

## LFTC-2000+



### 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

### Features

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

### Applications

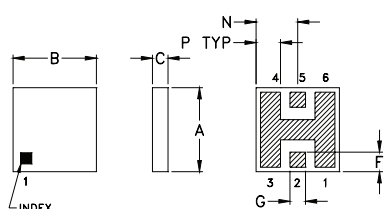
- harmonic rejection
- internal rejection
- receivers & transmitters

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

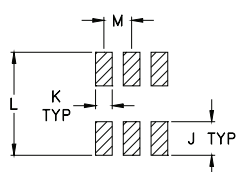
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

### Outline Drawing



### PCB Land Pattern

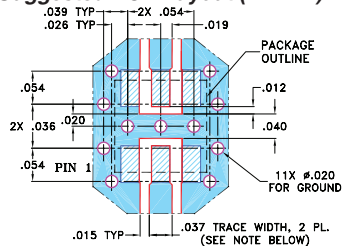


Suggested Layout,  
Tolerance to be within ±.002

### 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)



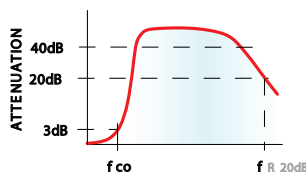
- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS 0.020" ± 0.0015"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.  
■ DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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

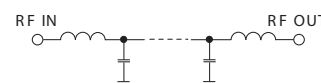
PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOP BAND (MHz)		fr20 dB	VSWR (:1) Passband	POWER INPUT* (W)	MARKING	NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	( > 20 dB)	(loss > 40 dB)	Typ.	Typ.			
DC-2000	2430	3450	4500-5500	8000	1.2	10	LF8	7

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

### typical frequency response

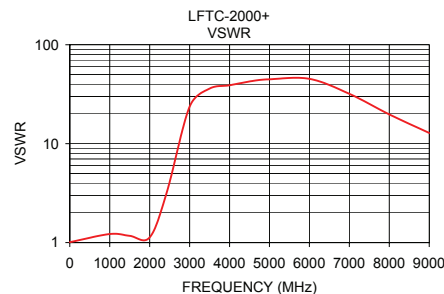
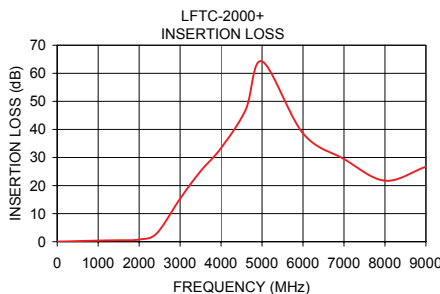


### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1.00	0.04	1.01
1000.00	0.39	1.22
1500.00	0.53	1.17
2000.00	0.77	1.13
2430.00	2.98	3.23
3000.00	15.33	23.65
3500.00	25.15	36.03
4000.00	33.38	38.95
4600.00	46.96	43.22
5000.00	64.27	44.76
6000.00	38.59	45.25
7000.00	29.45	31.94
8000.00	21.74	19.74
9000.00	26.73	12.84



For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

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