

# Ceramic Low Pass Filter

50Ω

DC to 4000 MHz

LFTC-4000+



Generic photo used for illustration purposes only

CASE STYLE: FR933

## Maximum Ratings

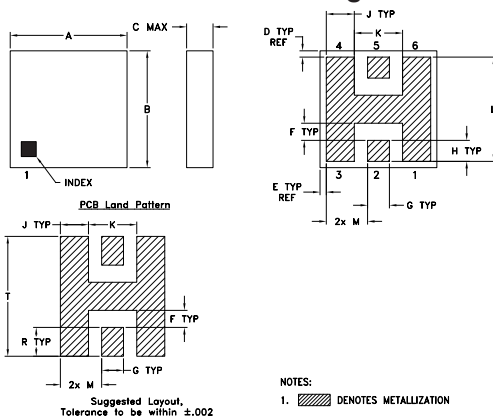
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 125°C
Permanent damage may occur if any of these limits are exceeded.	

## Pin Connections

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

## Product Marking: LF10

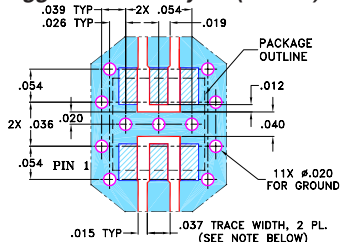
## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.150	.150	.034	.008	.022	.028	.027	
3.81	3.81	0.864	0.203	0.203	0.559	0.711	0.686
J	K	L	M	R	T	wt	
.036	.062	.134	.053	.037	.154	grams	
0.914	1.575	3.404	1.346	0.940	3.912	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

## Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

## Features

- miniature size, 0.15"X0.15"X0.034"
- low profile, 0.034" height
- excellent power handling, 10W
- hermetically sealed

## Applications

- harmonic rejection
- internal rejection
- receivers & transmitters

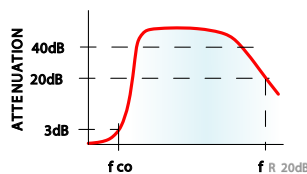
## Electrical Specifications<sup>1</sup> (T<sub>AMB</sub>=25°C)

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

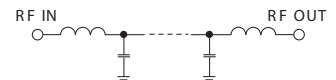
\* Derate linearly to 4W at 100°C ambient.

1. Measured on Mini-Circuits Characterization Test Board TB-233.

## typical frequency response

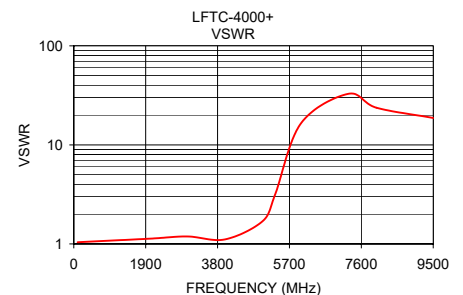
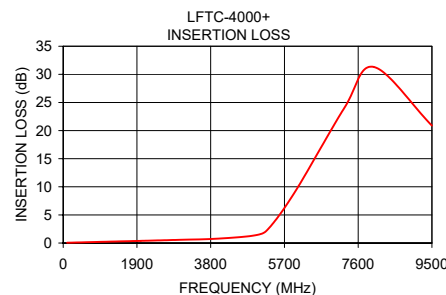


## electrical schematic



## 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



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