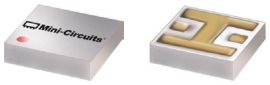
Ceramic

Low Pass Filter

LFTC-4000+

50Ω DC to 4000 MHz



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

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

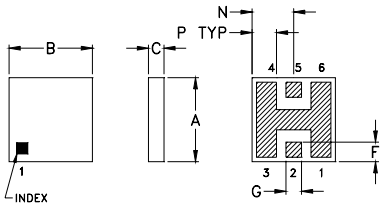
+RoHS Compliant

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

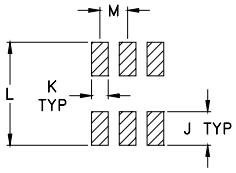
Available Tape and Reel at no extra cost

Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000
13"	2000, 4000

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	.034	--	--	.035	.028	--
3.81	3.81	0.86	--	--	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

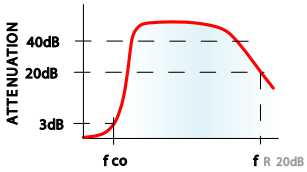
Electrical Specifications[1] (T_{AMB}=25°C)

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

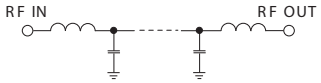
* Derate linearly to 4W at 100°C ambient.

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

typical frequency response

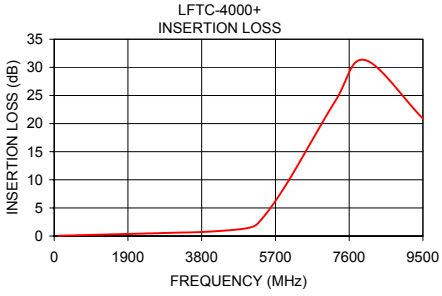


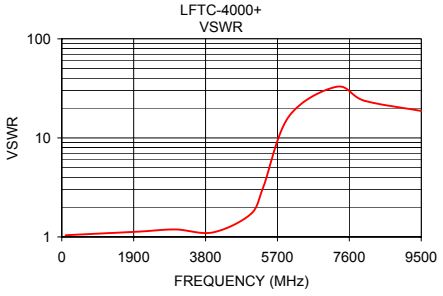
electrical schematic



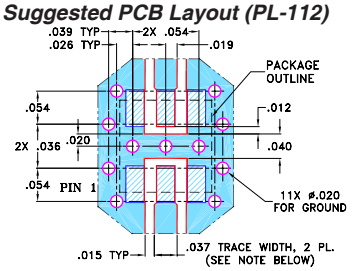
Typical Performance Data at 25°C

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





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

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document 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