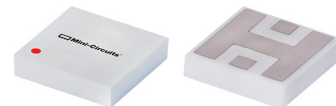


Ceramic Low Pass Filter

50Ω DC to 1700 MHz

LFTC-1700+



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

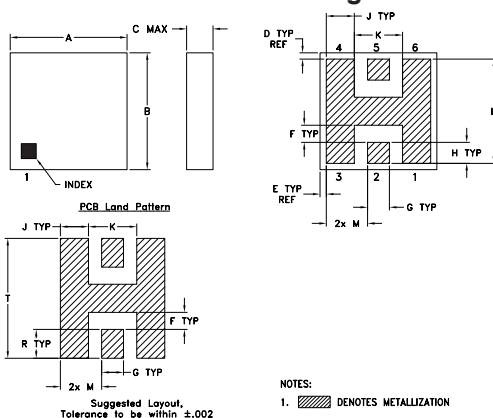
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Product Marking: LF4

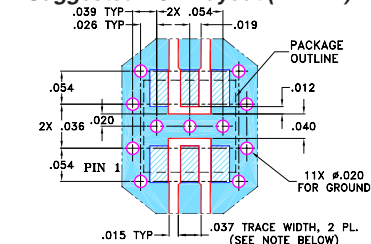
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.150	.150	.034	.008	.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

- 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

Features

- miniature size, 0.15"X0.15"X0.034"
- low profile, 0.034" height
- excellent power handling, 14W
- hermetically sealed

Applications

- harmonic rejection
- internal rejection
- receivers & transmitters

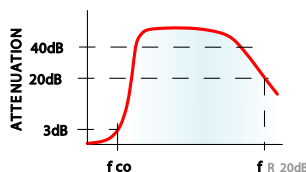
Electrical Specifications¹ (T_{AMB}=25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOP BAND (MHz)		VS _{WR} (:1) Passband	POWER INPUT* (W)	MARKING	NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	(> 20 dB)	(loss > 40 dB)	fr20 dB			
Typ.	Typ.	Typ.	Typ.	Typ.			
DC-1700	1980	2700	3300-3750	7200	1.2	14	LF4

* Derate linearly to 6W 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)	VS _{WR} (:1)
1.00	0.04	1.01
1000.00	0.43	1.17
1700.00	0.82	1.17
1980.00	2.94	3.21
2700.00	24.07	36.29
3300.00	44.62	45.32
3880.00	43.57	48.21
5000.00	36.48	59.14
7200.00	24.33	45.18
9000.00	8.94	7.75

