

Ceramic Low Pass Filter

50Ω DC to 1700 MHz

LFTC-1700+



Generic photo used for illustration purposes only

CASE STYLE: FR933

Maximum Ratings

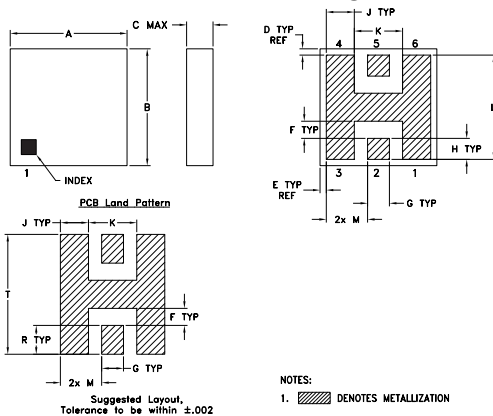
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 125°C
Permanent damage may occur if any of these limits are exceeded.	

Pin Connections

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

Product Marking: LLF4

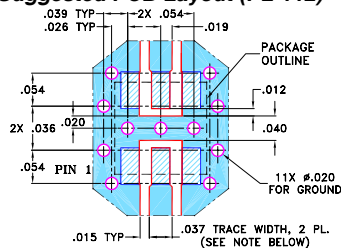
Outline Drawing



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.

Blue hatched area DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

White hatched area 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-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

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

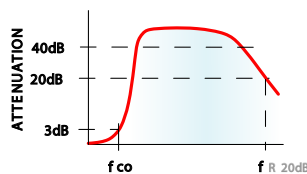
Electrical Specifications¹ (T_{AMB}=25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOP BAND (MHz)		VSWR (: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	7

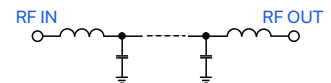
* Derate linearly to 6W at 100°C ambient.

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

typical frequency response

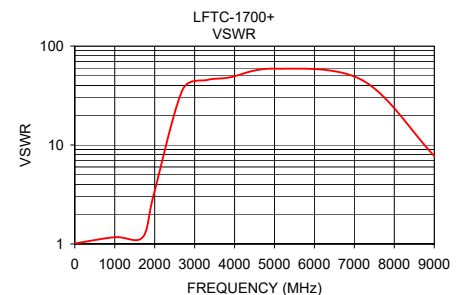
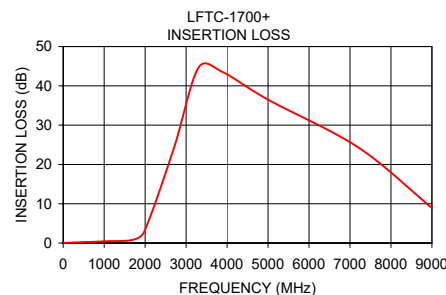


electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (: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
3680.00	43.57	48.21
5000.00	36.48	59.14
7200.00	24.33	45.18
9000.00	8.94	7.75



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