

Ceramic Low Pass Filter

50Ω DC to 1700 MHz

LFTC-1700+



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, 14W
- hermetically sealed

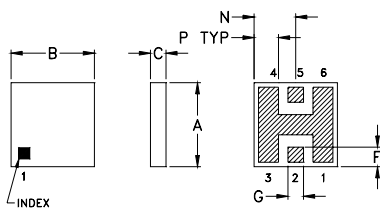
Applications

- harmonic rejection
- internal rejection
- receivers & transmitters

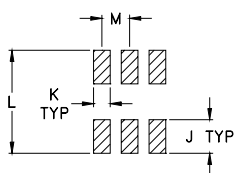
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

Outline Drawing



PCB Land Pattern

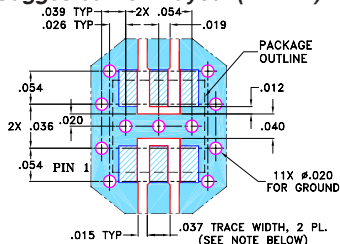


Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch)

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	

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-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



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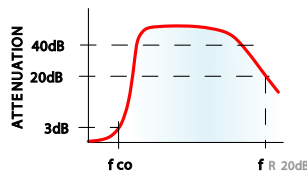
Electrical Specifications¹ (T_{AMB}=25°C)

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)	fr20 dB						
Typ.	Typ.	(> 20 dB)	(loss > 40 dB)	Typ.	Typ.			
DC-1700	1980	2700	3300-3750	7200	1.2	14	LF4	7

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

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

typical frequency response

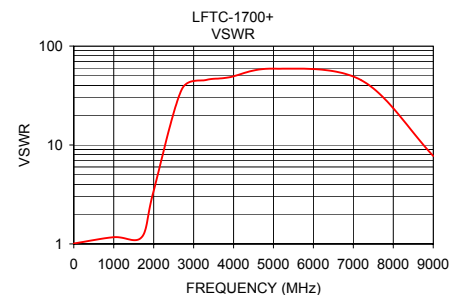
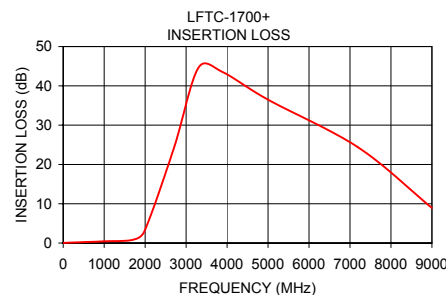


electrical schematic



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
3880.00	43.57	48.21
5000.00	36.48	59.14
7200.00	24.33	45.18
9000.00	8.94	7.75



REV. P
M151107
LFTC-1700+
EDB-020539
AD/YB/CP/AM
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