

Ceramic High Pass Filter

HFTC-19+

50Ω 2300 to 5500 MHz



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

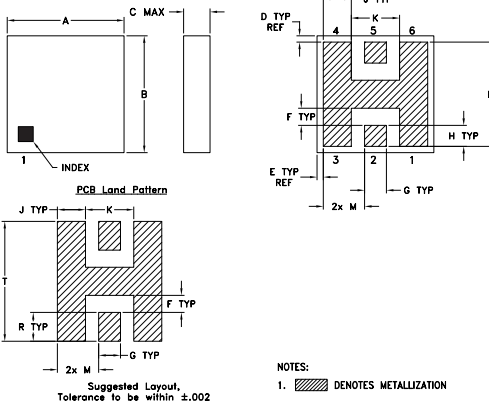
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Product Marking: HF6

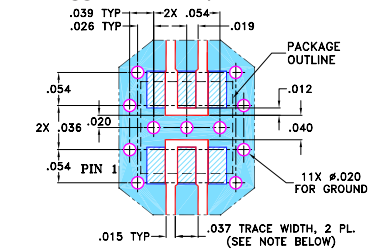
Outline Drawing



Outline Dimensions (inches/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:
- 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.
 - 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

Features

- miniature size, 0.15"X0.15"X0.034"
- low profile, 0.034" height
- low pass-band insertion loss, 1.0 dB typ.
- excellent input power handling, 10W
- hermetically sealed

Applications

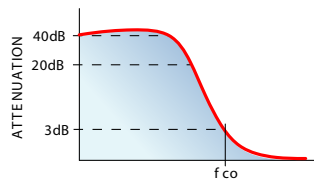
- sub-harmonic rejection
- transmitters/receivers
- dc blocking

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

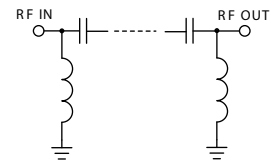
STOP BAND (MHz)	f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR (:1)	POWER INPUT* (W)	MARKING	NO. OF SECTIONS
(loss > 40 dB)	(loss 3 dB)	(loss < 1.3 dB)	Stopband Passband			
DC-1450	1995	2300-5500	Typ. Typ.	10	HF6	7

* 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)
1.00	103.75	436.58
500.00	49.23	81.78
1000.00	42.91	64.39
1450.00	54.47	47.42
1650.00	27.32	32.07
1995.00	4.42	3.50
2300.00	0.94	1.19
3600.00	0.51	1.11
4000.00	0.52	1.16
5500.00	0.66	1.25

