

High Pass Filter

HFCN-3500D+

50Ω 3900 to 9800 MHz

Maximum Ratings

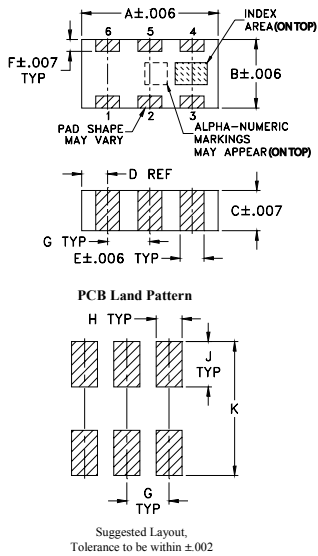
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C
Max. DC Voltage at pins 1&3	25 VDC

*Passband rating, derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

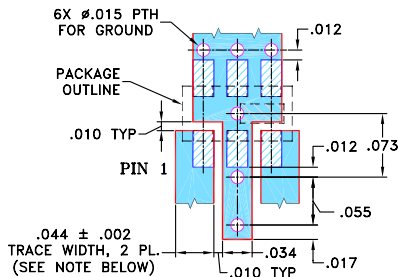
Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K	wt	
.039	.024	.042	.123	grams	
0.99	0.61	1.07	3.12	.020	

Demo Board MCL P/N: TB-285 Suggested PCB Layout (PL-158)



- NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS: .020 ± .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
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

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

- Low cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- Hermetically sealed
- LTCC construction
- Protected by US Patent 7,760,485

Applications

- Sub-harmonic rejection
- Transmitters / receivers



CASE STYLE: FV1206-1

+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

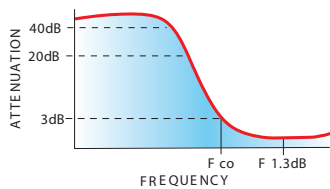
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500, 1000, 3000

Electrical Specifications^{1,2} at 25°C

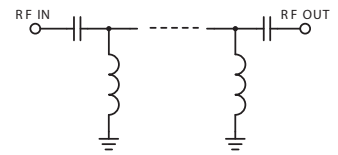
STOPBAND (MHz)	f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss < 1.5dB) Max.	Frequency (MHz) Stopband 1.5:1	Max.	
2900	2800	3500	3650-9500	7	5

1. DC Resistance to ground is 100 Mohms min.
2. Measured on Mini-Circuits Characterization Test Board TB-285.

typical frequency response



electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	59.26	1737.18
400	41.60	434.30
1500	38.09	115.81
2800	35.62	34.75
2900	38.74	30.49
3050	24.44	24.14
3250	12.48	12.61
3400	6.15	5.42
3500	3.42	2.92
3650	1.63	1.53
3900	1.17	1.51
4000	1.14	1.59
6000	0.71	1.06
8800	0.74	1.23
9500	1.36	1.48
9800	1.41	1.87
14000	2.60	1.49

