

# High Pass Filter

50Ω 5500 to 10000 MHz

## HFCN-5050+



CASE STYLE: FV1206-1  
PRICE: \$2.99 ea. QTY (20)

**+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

### Maximum Ratings

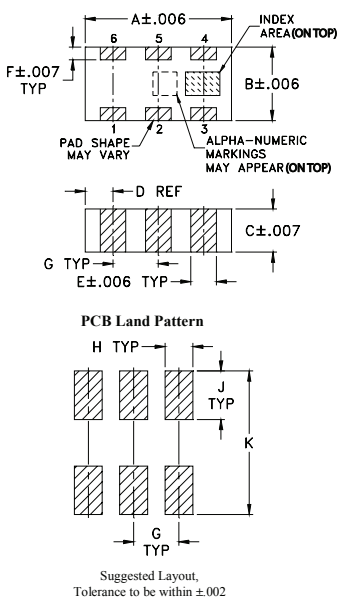
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

\*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

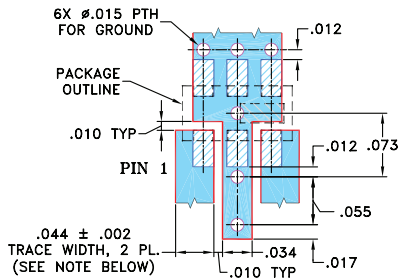
### Outline Drawing



### Outline Dimensions (inch/mm)

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 R04350 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

### 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

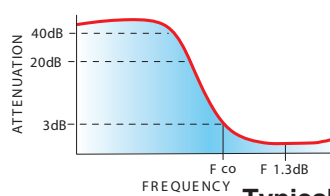
- Sub-harmonic rejection and DC blocking
- Transmitters / receivers

### Electrical Specifications<sup>(1,2)</sup> at 25°C

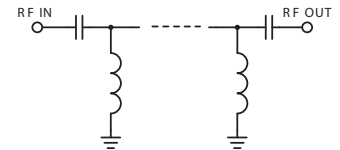
STOPBAND (MHz)	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss < 3 dB) Typ.	Frequency (MHz) 1.5:1	Max.	
3600	4200	5050	20:1	7	5

- (1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.  
(2) Measured on Mini-Circuits Characterization Test Board TB-285.

### typical frequency response

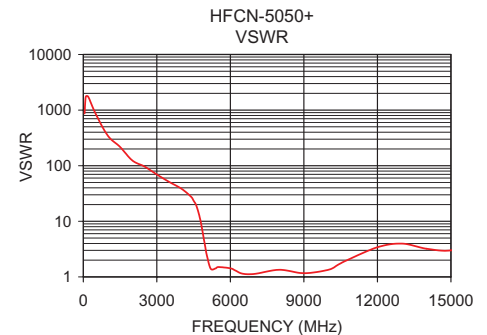
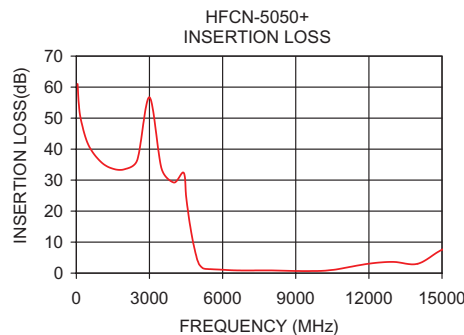


### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	61.01	868.59
1000	35.93	347.44
3600	32.03	48.26
4200	31.40	32.79
4700	13.75	14.38
4800	9.47	9.38
4950	4.60	4.01
5050	2.70	2.35
5200	1.55	1.40
5500	1.29	1.51
5650	1.27	1.55
9700	0.65	1.16
10000	0.72	1.34
10700	1.24	1.94
12000	3.06	3.42
14000	3.02	3.21
15000	7.56	3.00



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](http://www.minicircuits.com/MCLStore/terms.jsp)