Ceramic **High Pass Filter**

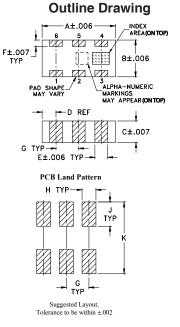
5500 to 10000 MHz **50**Ω

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25ºC
*Passband rating, derate linearly Permanent damage may occur if an	y to 3W at 100°C ambient.

Pin Connections

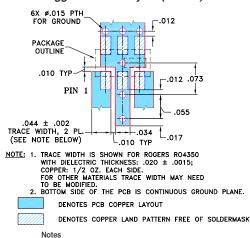
RF IN	1
RF OUT	3
GROUND	2,4,5,6



Outline Dimensions (inch)

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

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



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



HFCN-5050+

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



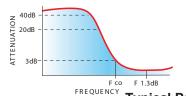
Electrical Specifications^(1,2) at 25°C

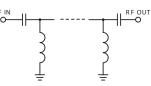
STOPBAND fco, MHz PASSBAND (MHz) Nom. (MHz)				VSWR Typ.		POWER INPUT	NO. OF SECTIONS	
(Loss > 30dB)	(Loss > 20dB)	(Loss 3 dB)	(Loss < 1.5dB)	(Loss < 2dB)		Frequency (MHz)	(W)	
Тур.	Min.	Тур.	Max.	Max.	Stopband	1.5:1	Max.	
3600	4200	5050	5650-9700	5500-10000	20:1	5200-10000	7	5

(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





VSWR

Typical Performance Data at 25°C

(MHz)	(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	

1

0

3000

6000

FREQUENCY (MHz)

9000

HFCN-5050+ **INSERTION LOSS** 70 10000 INSERTION LOSS(dB) 60 1000 50 **VSWR** 40 100 30 20 10 10 0 0 3000 6000 9000 12000 15000 FREQUENCY (MHz)

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 А. В.

REV. F M151107 EDR-8120/4 HFCN-50504 RAV/CP/AM 150729 page 1 Page 1 of 1

15000

12000

Mini-Circuits

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com