

High Pass Filter

50Ω 9000 to 13000 MHz

HFCN-8400D+



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

Maximum Ratings

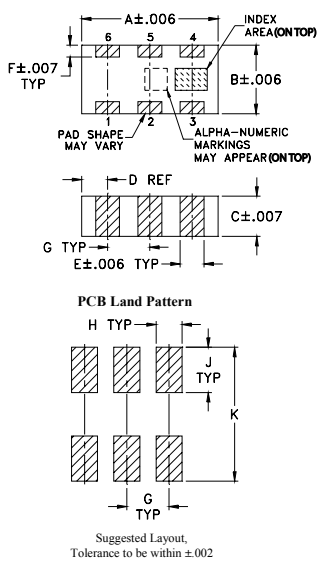
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C
Max. DC Voltage at pins 1&3	25 VDC

*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

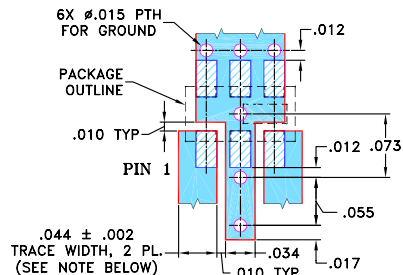
Outline Drawing



Outline Dimensions (inch/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)



- DENOTES PCB COPPER LAYOUT
- DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

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

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

Applications

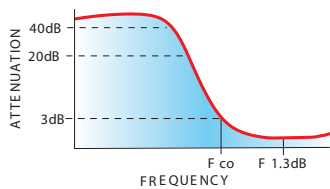
- Sub-harmonic rejection
- Transmitters / receivers

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

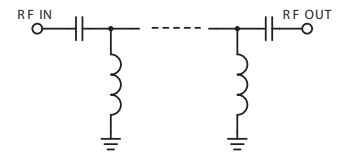
STOPBAND (MHz)	f _{co} , MHz Nom.	PASSBAND (MHz)	VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss 3 dB) Typ.	(Loss < 2.5dB) Max.	Frequency (MHz) 1.5:1	Max.	
5700	8400	9500-13000	20:1	7	5

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

typical frequency response



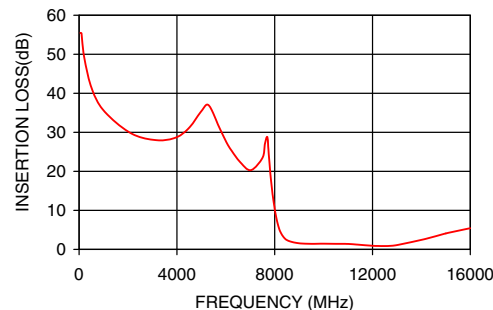
electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	55.48	1737.18
500	41.57	868.59
4500	31.17	49.64
5700	36.69	31.60
6000	27.78	29.46
7500	23.46	17.05
8020	9.65	5.68
8400	2.88	1.50
8600	2.11	1.15
9000	1.57	1.06
9500	1.43	1.24
10000	1.47	1.46
12000	0.92	1.22
13000	1.10	1.48
16000	5.43	4.72

HFCN-8400D+ INSERTION LOSS



HFCN-8400D+ VSWR

