High Pass Filter

50Ω 9000 to 13000 MHz

Maximum Ratings

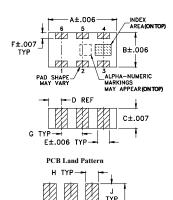
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C
*Passband rating, derate linearly to 3	W at 100°C ambient.

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

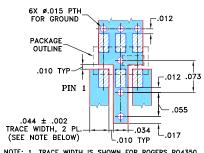


→ G TYP Suggested Layout, Tolerance to be within ±.002

Outline Dimensions (inch)

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

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 02. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED
TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PL

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
- Transmitters / receivers

HFCN-8400+ **HFCN-8400**



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



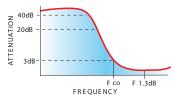
Electrical Specifications(1,2) at 25°C

	STOPBAND (MHz)		PASSBAND (MHz)			SWR yp. Frequency	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss 3 dB) Typ.	(Loss < 2.5dB) Max.	(Loss < 3dB) Max.	Stopband	(MHz) 1.5:1	Max.	
5700	6000	8400	9500-13000	9000-13000	20:1	9000-13000	7	5

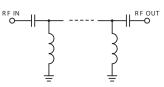
(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required. Alternatively, Mini-Circuits' "D" suffix version of this model will provide>100 MOhm isolation to ground.

(2) Measured on Mini-Circuits Characterization Test Board TB-285.

typical frequency response



electrical schematic

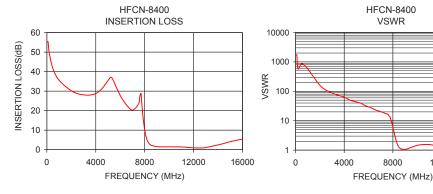


8000

12000

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



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-Circuits tapplicable 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

16000