

High Pass Filter

50Ω, 9000 to 13000 MHz

Maximum Ratings

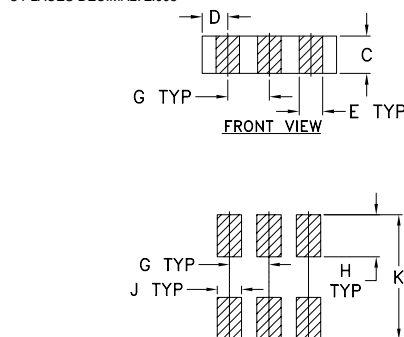
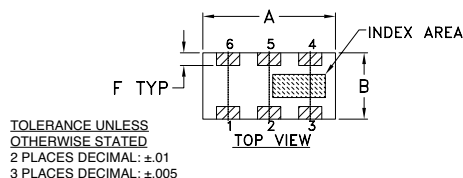
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W*
*derate linearly to 3W at 100°C ambient	

Pin Connections

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

**RF IN & RF OUT can be interchanged

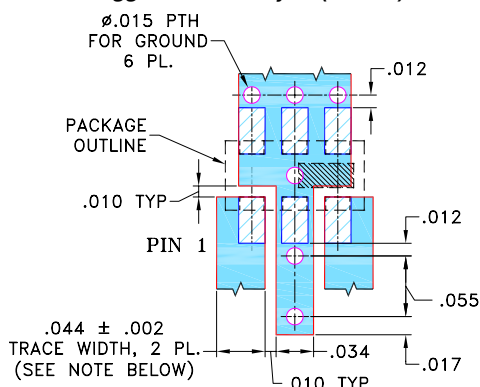
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	wt.
.126	.063	.035	.024	.022	.012	.039	.042	.024	.123	grams
3.20	1.60	0.89	0.61	0.56	0.30	0.99	1.07	0.61	3.12	.02

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



- 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.
 - 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
- DC block in/out, breakdown voltage, 1kV typ.
- Hermetically sealed
- Patent pending

Application

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

HFCN-8400+ HFCN-8400



CASE STYLE: FV1206-1

Model	Price	Qty.
HFCN-8400+	\$2.99	(10-49)
HFCN-8400	\$2.99	(10-49)
HFCN-8400D+	\$3.49	(10-49)
HFCN-8400D	\$3.49	(10-49)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

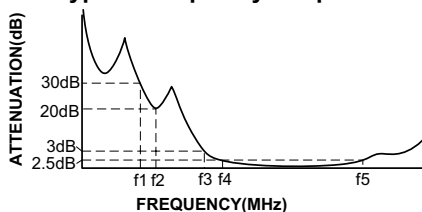
See our web site for RoHS Compliance methodologies and qualifications.

High Pass Filter Electrical Specifications¹ (T_{AMB} = 25°C)

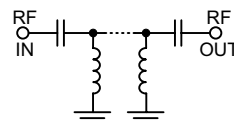
MODEL NO.	STOPBAND (MHz)		fco, MHz Nom. (Loss 3dB)	PASSBAND (MHz)		VSWR Typ. Stopband Frequency (MHz)	POWER INPUT (W) Max.
	Typ. DC-f1	Min. DC-f2		Max. f4-f5	Max. f4-f5		
HFCN-8400(+)	DC-5700	DC-6000	8400	9500-13000	9000-13000	20:1 9000-13000	7

1. For Applications requiring DC voltage to be applied to the input or output, use HFCN-8400D (DC Resistance to ground is 100 Mohms min.)

Typical Frequency Response



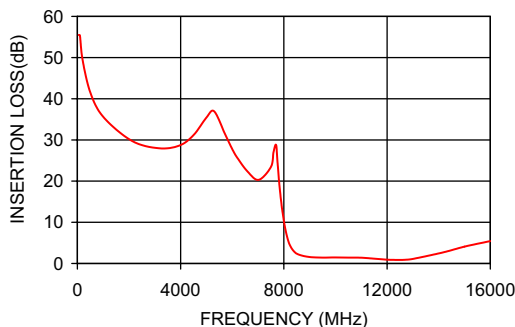
Schematic



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-8400
INSERTION LOSS



HFCN-8400
VSWR

