

# High Pass Filter

## VHF-8400+ VHF-8400

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 3W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

### Features

- Low cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- DC block in/out, breakdown voltage, 1kV typ.

### Application

- Sub-harmonic rejection and DC blocking
- Transmitters/Receivers
- Lab use
- Instrumentation
- Test equipment

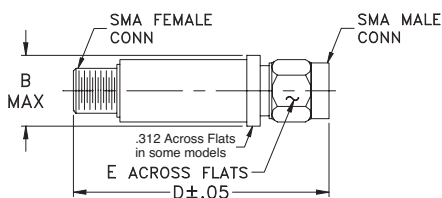


CASE STYLE: FF704

Connectors	Model	Price	Qty.
SMA	VHF-8400	\$24.95 ea.	(1-9)
SMA	VHF-8400+	\$24.95 ea.	(1-9)

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

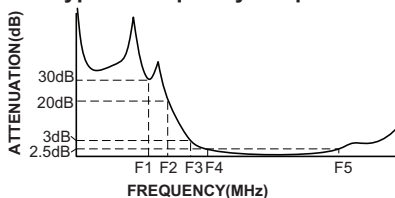
### Outline Drawing



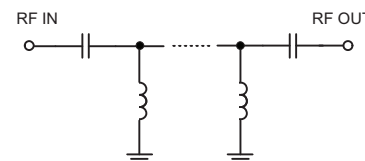
### High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

STOPBAND (MHz)		f <sub>co</sub> , MHz	PASSBAND (MHz)		VSWR		NO. OF SECTIONS
(Loss>30dB)	(Loss>20dB)	Nom.	(Loss<2.5dB)	(Loss<3dB)	Typ.	Frequency (MHz)	
Typ. DC-F1	Min. DC-F2	Typ. F3	Max. F4-F5	Max.	Stopband	Frequency	
DC-5700	DC-6000	8400	9500-13000	9000-13000	20:1	9000-13000	5

### Typical Frequency Response



### Electrical schematic



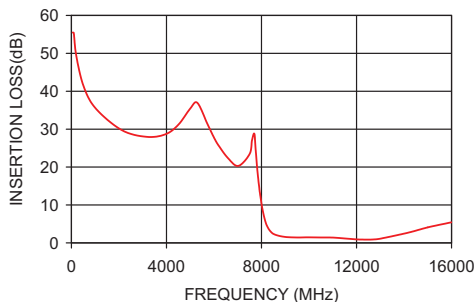
### Outline Dimensions (inch/mm)

B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

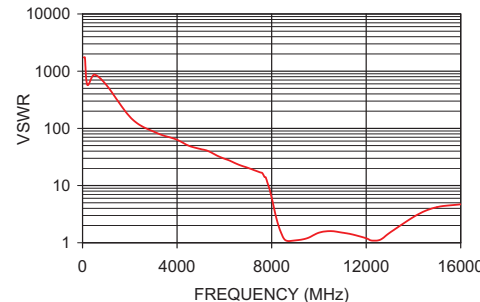
### Typical Performance Data at 25°C

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

VHF-8400  
INSERTION LOSS



VHF-8400  
VSWR



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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).