

# 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.

### 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



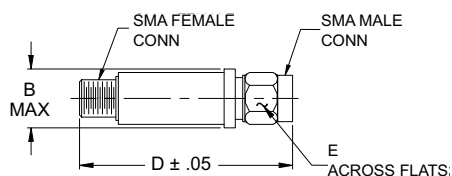
CASE STYLE: FF704

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

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

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

### Outline Drawing



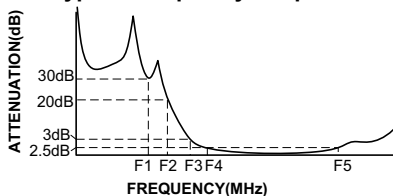
### Outline Dimensions (Inch/mm)

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

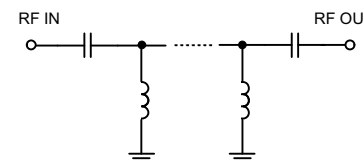
### High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

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

### Typical Frequency Response



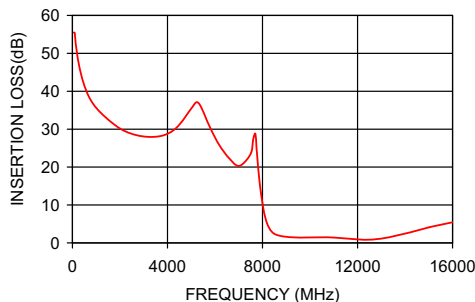
### Electrical Schematic



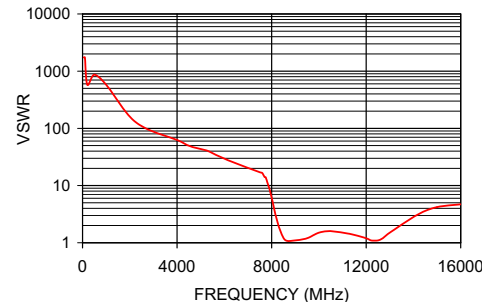
### Typical Performance Data at 25°C

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

VHF-8400 INSERTION LOSS



VHF-8400 VSWR



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS

REV. A  
M101678  
EDR-6982/5  
VHF-8400  
RAV  
070401  
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