

# High Pass Filter

## VHF-3500+

50Ω 3900 to 9800 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

- Rugged uni-body construction, small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- Low cost

### Application

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



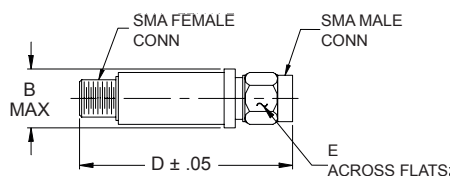
CASE STYLE: FF704

Connectors	Model	Price	Qty.
SMA	VHF-3500+	\$24.95 ea.	(1-9)

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Outline Drawing



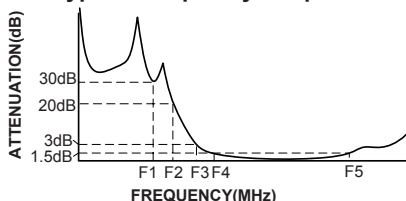
### Outline Dimensions (Inch/mm)

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

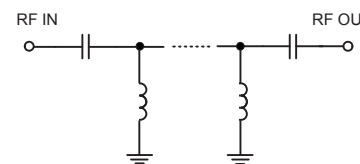
### High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

STOPBAND (MHz)		f <sub>co</sub> , MHz	PASSBAND (MHz)		VSWR		NO.OF SECTIONS
(Loss> 30dB)	(Loss>20dB)	Nom.	(Loss<1.5dB)	(Loss<2dB)	Typ.	Frequency	
Typ. DC-F1	Min. DC-F2	Typ. F3	Max. F4-F5	Max.	Stopband	1.5:1	
DC-2900	DC-2800	3500	4000-8800	3900-9800	20:1	3650-9500	5

### Typical Frequency Response



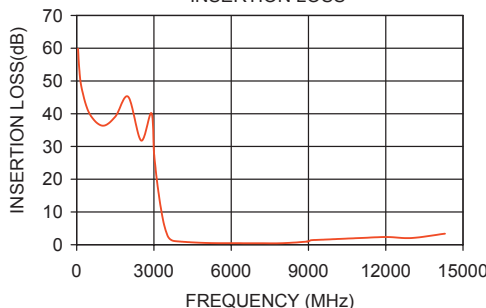
### Electrical schematic



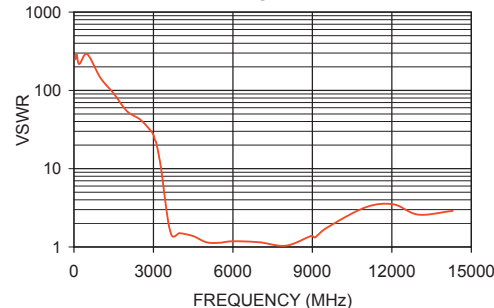
### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	59.86	248.17
400	41.76	193.02
1500	39.10	91.43
2800	35.93	37.77
2900	40.20	30.49
3050	24.27	23.49
3250	12.23	12.26
3400	5.96	5.15
3500	3.30	2.82
3650	1.55	1.51
3900	1.04	1.44
4000	0.97	1.50
6000	0.47	1.18
8800	0.75	1.34
9500	1.43	1.68
9800	1.53	2.19
14000	1.82	1.53

VHF-3500+ INSERTION LOSS



VHF-3500+ 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)

REV. OR  
M106185  
EDR-8120/2  
VHF-3500+  
RAV  
090826  
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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).