

# High Pass Filter

50Ω 4250 to 10000 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

# VHF-3800+ VHF-3800



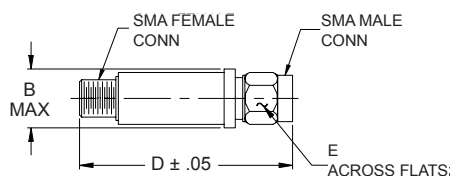
CASE STYLE: FF704

Connectors	Model	Price	Qty.
SMA	VHF-3800	\$24.95 ea.	(1-9)
SMA	VHF-3800+	\$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



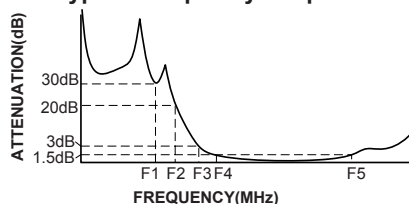
## Outline Dimensions (Inch/mm)

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

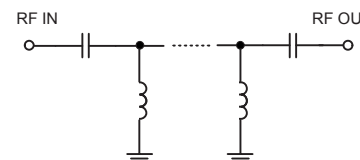
## High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

STOPBAND (MHz)		f <sub>co</sub> , MHz	PASSBAND (MHz)		VSWR		NO OF SECTIONS
(Loss>30dB)	(Loss>20dB)	Nom.	(Loss<1.5dB)	(Loss<2dB)	Typ.	Frequency (MHz)	
Typ. DC-F1	Min. DC-F2	Typ. F3	Max. F4-F5	Max.	Stopband	1.5:1	5
DC-3100	DC-3200	3800	4500-9000	4250-10000	20:1	3950-10000	

## Typical Frequency Response



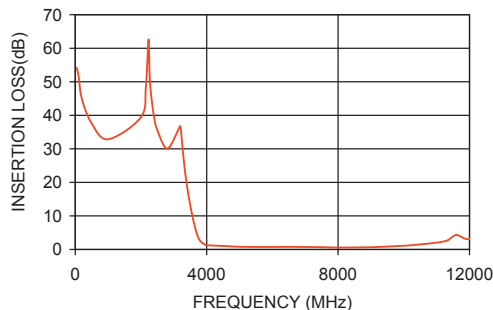
## Electrical schematic



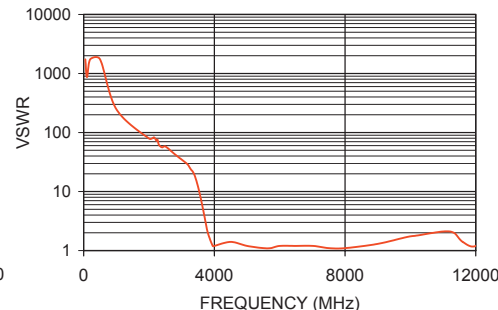
## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	54.14	1737.18
500	37.58	1737.18
1500	32.52	108.58
3100	33.38	31.60
3200	36.68	28.03
3400	19.19	18.90
3550	10.63	9.33
3800	2.59	2.00
3950	1.41	1.16
4250	1.14	1.45
4500	1.02	1.43
7000	0.72	1.22
9000	0.68	1.28
10000	1.13	1.70
11330	2.71	1.96
12000	3.15	1.70

VHF-3800  
INSERTION LOSS



VHF-3800  
VSWR



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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).

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