

# High Pass Filter

VHF-3800+

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

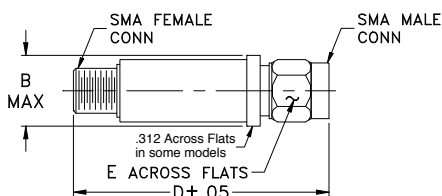


CASE STYLE: FF704  
Connectors Model  
**SMA** VHF-3800+

### +RoHS Compliant

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

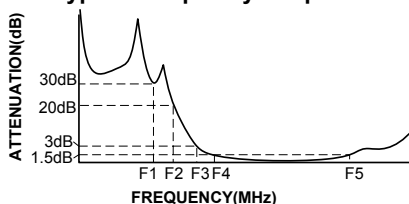
## Outline Drawing



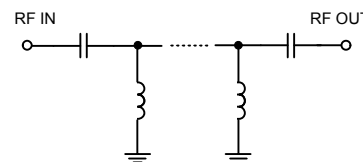
## High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

STOPBAND (MHz)		fco, 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	
DC-3100	DC-3200	3800	4500-9000	4250-10000	20:1	3950-10000	5

## Typical Frequency Response



## Electrical schematic



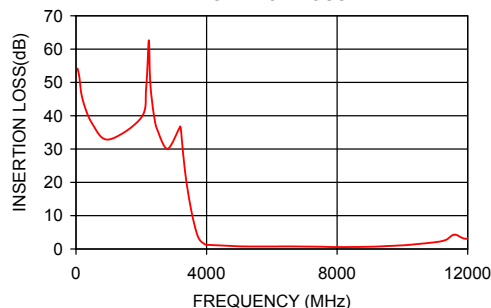
## Typical Performance Data at 25°C

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

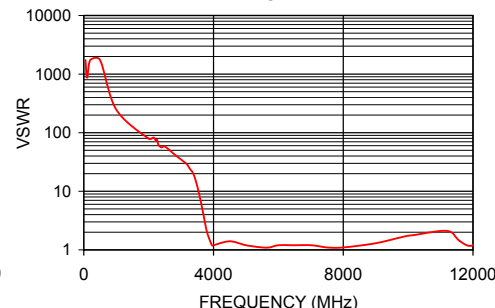
## Outline Dimensions (inch/mm)

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

VHF-3800+ INSERTION LOSS



VHF-3800+ VSWR



### Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
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