

# Coaxial High Pass Filter

## VHF-650+

50Ω 710 to 2490 MHz



Generic photo used for illustration purposes only

### 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 unibody construction, small size
- 7 sections
- temperature stable
- excellent power handling, 7W
- low cost

### Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use

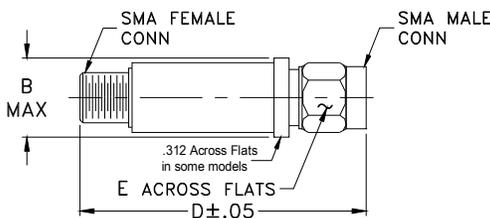
CASE STYLE: FF704

Connectors	Model
SMA	VHF-650+

**+RoHS Compliant**

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

### Outline Drawing



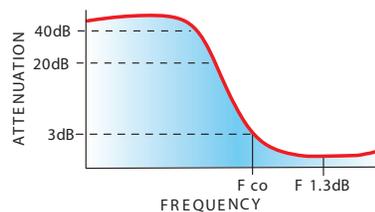
### Outline Dimensions (inch/mm)

B	D	E	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

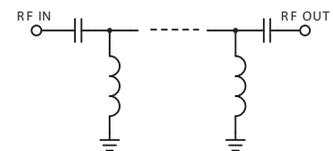
### Electrical Specifications (T<sub>AMB</sub>=25°C)

STOP BAND (MHz)		f <sub>co</sub> , MHz	PASSBAND (MHz)		VSWR (:1)	NO. OF SECTIONS
Min.	Typ.	Nom.	Max.	Typ.	Typ.	
(loss > 40 dB)	(loss > 20 dB)	(loss 3 dB) Typ.	(loss < 1.3 dB) Max.	(loss < 2 dB) Typ.	Frequency (MHz) Stopband 1.5:1	7
390	480	650	850-2000	710-2490	20:1 760-1700	

### typical frequency response

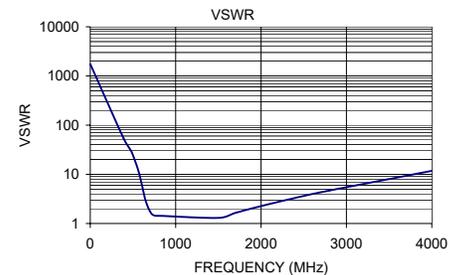
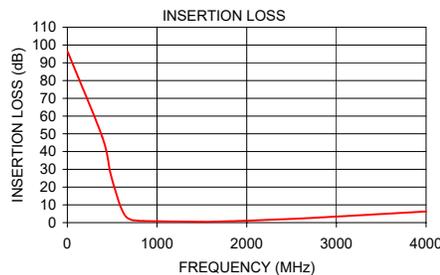


### electrical schematic



### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	96.55	1737.18
390	48.08	54.29
480	28.02	29.46
560	14.00	12.44
600	8.19	6.58
650	3.57	2.84
710	1.63	1.65
760	1.20	1.44
850	0.91	1.43
1500	0.45	1.30
1700	0.62	1.64
2000	1.06	2.26
2490	2.07	3.60
2800	2.83	4.67
4000	6.27	11.77



### 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-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document 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/WCLStore/terms.jsp](http://www.minicircuits.com/WCLStore/terms.jsp)

