

# Low Pass Filter

## VLF-160+

50Ω \*DC to 160 MHz

### Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8W at 25°C
DC Current Input to Output	0.5A max. at 25°C

\*Passband rating, derate linearly to 3 W at 100 °C ambient  
Permanent damage may occur if any of these limits are exceeded.

### Features

- Rugged uni-body construction, small size
- 7 sections
- Excellent power handling, 8W
- Temperature stable
- Low cost
- Protected by US patent 6,943,646

### Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use



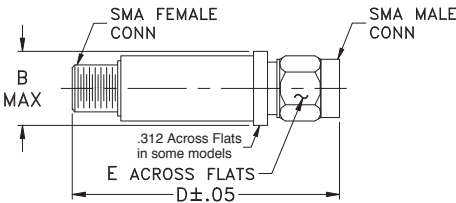
CASE STYLE: FF704

Connectors	Model
SMA	VLF-160+

**+RoHS Compliant**

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

### Outline Drawing



### Outline Dimensions (inch mm)

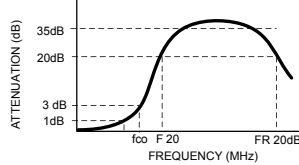
B	D	E	wt.
.410	1.43	.312	grams
10.41	36.32	7.92	10

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

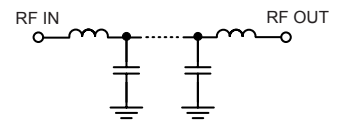
PASSBAND (MHz) (loss < 1 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		F 20 Min.	35 Typ.	FR 20 Typ.	Stopband Typ.	Passband Typ.	
*DC - 160	230	330	480 - 2700	6100	17	1.2	7

\* Not for use with DC voltage at input and output ports

### Typical frequency response



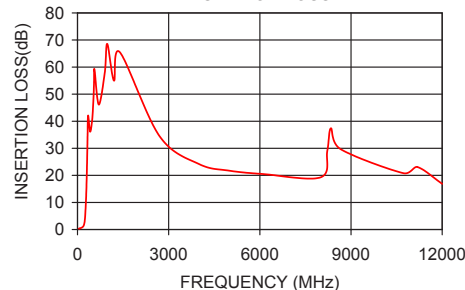
### Electrical schematic



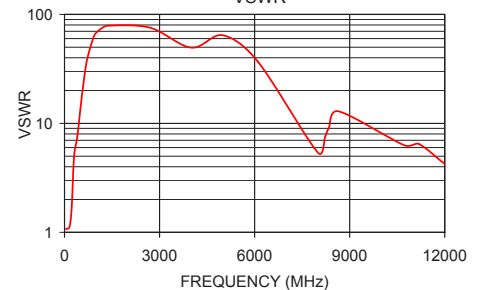
### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
40	0.32	1.07
100	0.52	1.08
150	0.78	1.11
160	0.85	1.13
210	1.64	1.44
230	2.55	1.77
260	6.08	2.81
280	10.97	3.87
310	22.74	5.27
330	33.27	5.81
350	42.12	6.19
480	40.13	11.85
1000	64.46	69.49
2700	34.45	75.53
6100	20.50	36.97
9000	23.14	15.13
12000	16.88	4.24

VLF-160+  
INSERTION LOSS



VLF-160+  
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-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

