

# Coaxial Low Pass Filter

50Ω

\*DC to 1700 MHz

VLF-1700+



CASE STYLE: FF704

Connectors	Model
SMA	VLF-1700+

**+RoHS Compliant**

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

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C
DC Current Input to Output	0.5A max. at 25°C

\* Passband rating, derate linearly to 3.5W 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, 10W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

## Applications

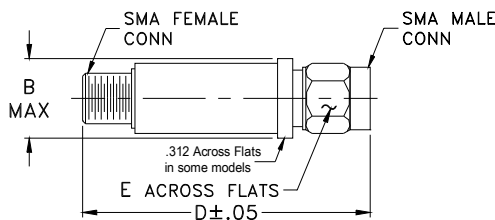
- harmonic rejection
- transmitters/receivers
- lab use

## Electrical Specifications at 25°C

PASSBAND (MHz) (loss < 1.2 dB)	f <sub>co</sub> , MHz Nom. (loss 3 dB)	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
		f 20 Min.	30 Typ.	fr 20 Typ.	Stopband Typ.	Passband Typ.	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
*DC-1700	2050	2375	2500-6500	7000	20	1.2	7

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

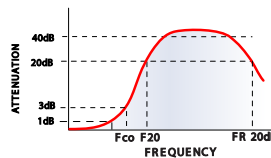
## Outline Drawing



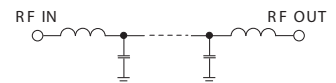
## Outline Dimensions (inch/mm)

B	D	E	gra
.410	1.43	.312	1
10.41	36.32	7.92	1

## typical frequency response

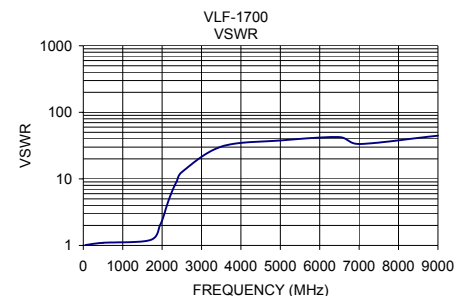


## electrical schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.05	1.01
500	0.21	1.09
1700	0.77	1.20
1950	2.11	2.03
2050	3.98	2.91
2100	5.73	3.64
2200	11.93	5.44
2300	23.47	7.53
2375	36.86	9.28
2500	33.29	12.61
3500	49.47	30.49
5000	41.34	37.77
6500	53.35	42.38
7000	23.20	33.42
9000	17.55	44.55



## 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 [sales@minicircuits.com](mailto:sales@minicircuits.com)

REV. H  
M151777  
VLF-1700+  
EDR-6469/4  
AD/TD/CP/AM  
150714  
Page 1 of 1