

# Coaxial Low Pass Filter

50Ω

\*DC to 1000 MHz

VLF-1000+  
VLF-1000



CASE STYLE: FF704

Connectors	Model
SMA	VLF-1000(+)

**+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 unibody construction, small size
- 7 sections
- excellent power handling, 10W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

## Applications

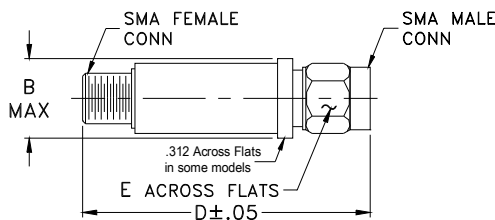
- harmonic rejection
- transmitters/receivers
- lab use

## Electrical Specifications at 25°C

PASSBAND (MHz) (loss < 1 dB)	fco, 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.						
*DC-1000	1300	1550	1900-5000	5500	20	1.3	7

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

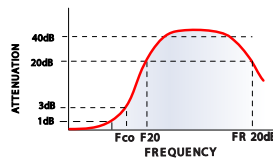
## Outline Drawing



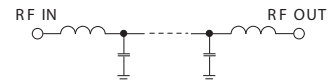
## Outline Dimensions (inch/mm)

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

## typical frequency response

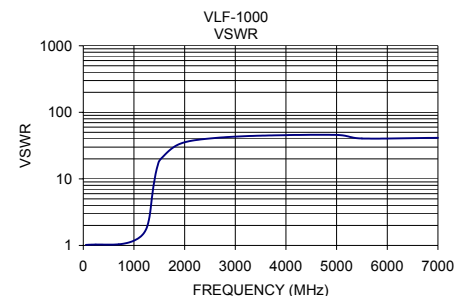
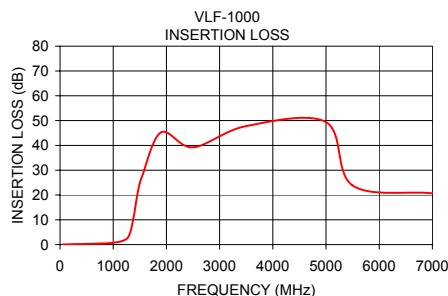


## electrical schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.07	1.02
250	0.18	1.03
700	0.39	1.04
1000	0.77	1.18
1200	1.69	1.55
1300	3.79	2.53
1380	10.57	7.31
1460	20.88	15.13
1550	27.95	20.70
1900	45.25	33.42
2500	39.24	40.41
3500	47.78	44.55
5000	49.39	45.72
5500	23.86	40.41
7000	20.67	41.37



## 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.
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REV. H  
M151107  
VLF-1000  
EDR-6608/1  
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