Coaxial

Low Pass Filter

50Ω *DC to 1000 MHz

VLF-1000+
VLF-1000

Generic photo used for illustration purposes only

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.

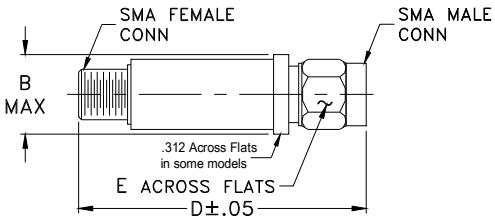
Features

- 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

Outline Drawing



Outline Dimensions (inch / mm)

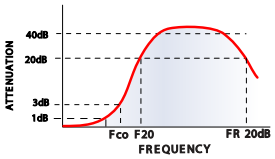
B	D	E	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

Electrical Specifications at 25°C

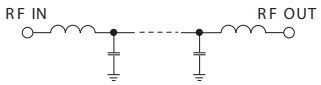
PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	F 20	30	Fr 20	Stopband	Passband	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
*DC-1000	1300	1550	1900-5000	5500	20	1.3	7

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

typical frequency response

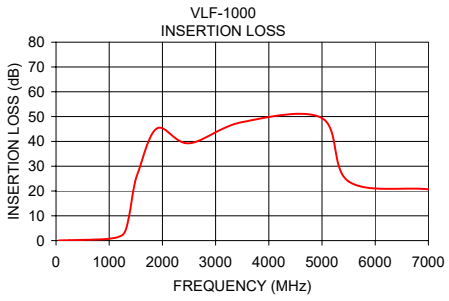


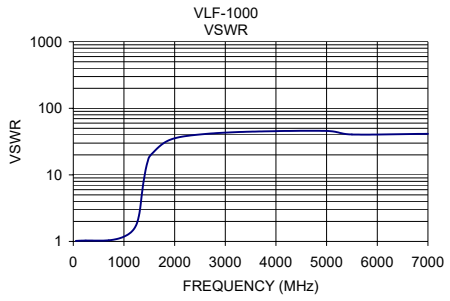
electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
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

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. 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