Coaxial

Low Pass Filter

VLF-5000+

50Ω *DC to 5000 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF704

Connectors	Model
SMA	VLF-5000+

+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*	9W max. at 25°C
DC Current Input to Output	0.5A 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.

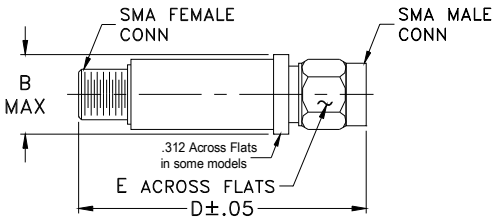
Features

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 9W
- 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)

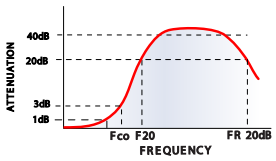
B	D	E	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

Electrical Specifications at 25°C

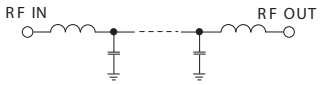
PASSBAND (MHz)	fco, MHz Nom.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
(loss < 1 dB)	(loss 3 dB)	f 20	30	fr 20	Stopband	Passband	
Max.	Typ.	Min.	Typ.	Typ.	Typ.	Typ.	
*DC-5000	5580	6850	7050-10000	18000	20	1.2	7

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

typical frequency response



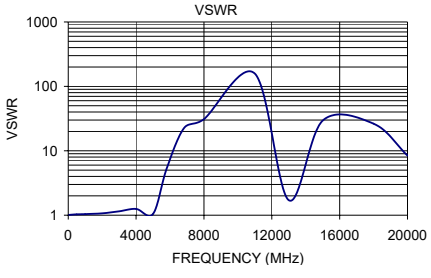
electrical schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50.00	0.01	1.01
500.00	0.10	1.03
1000.00	0.14	1.04
2000.00	0.26	1.07
3000.00	0.31	1.15
4000.00	0.51	1.25
5000.00	0.68	1.05
5800.00	4.91	5.30
6830.00	40.67	22.58
8000.00	28.12	31.03
11000.00	32.43	157.93
13000.00	25.15	1.71
15000.00	24.88	29.46
18000.00	18.17	26.33
20000.00	23.63	8.43





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