Low Pass Filter

VLF-5000+

 50Ω

*DC to 5000 MHz

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

Applications

 harmonic rejection • transmitters/receivers

· low cost

• lab use

• protected by U.S. Patent 6,943,646

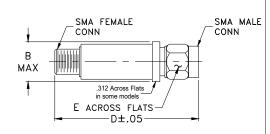
CASE STYLE: FF704

Connectors	Model	Price	Qty.
SMA	VLF-5000+	\$21.95 ea.	(1-9)

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch)

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

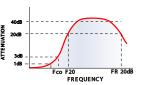
Electrical Specifications at 25°C

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.	Тур.	Min.	Тур.	Тур.	Тур.	Тур.	
*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

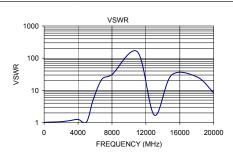




Typical Performance Data at 25°C

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





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 fixed 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