

Low Pass Filter

VLFX-500

50Ω DC to 500 MHz (40 dB Isolation up to 20 GHz)

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

RF Power Input* 10W max. at 25°C

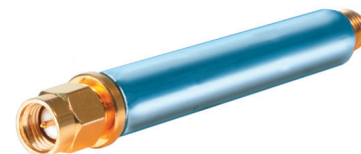
*Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

Features

- very good isolation, 40 dB up to 20 GHz
- 21 sections
- excellent power handling, 10W
- temperature stable LTCC internal structure
- re-entry frequency > 20 GHz
- rugged unibody construction
- protected by US patent 6,943,646

Applications

- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



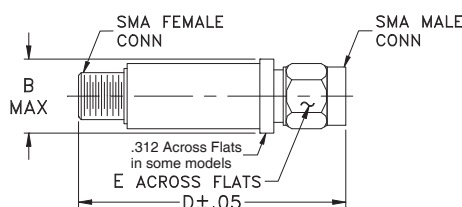
CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-500	\$39.95 ea.	(1-9)

+RoHS Compliant

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

Outline Drawing



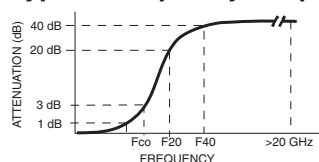
Outline Dimensions (inch mm)

B	D	E	wt.
.410	2.67	.312	grams
10.41	67.82	7.92	17.0

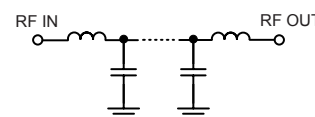
Low Pass Filter Electrical Specifications @ 25°C

MODEL NO.	PASSBAND (MHz) (Loss < 1.2dB) Max.	F _{co} , MHz Nom (Loss 3 dB) Typ	STOPBAND (MHz) (Loss, dB)		VSWR (:1)		NO. OF SECTIONS
			F20 Min.	F40 Typ.	Stopband Typ.	Passband Typ.	
VLFX-500	DC-500	750	900	1100-20000	10	1.15	21

Typical Frequency Response

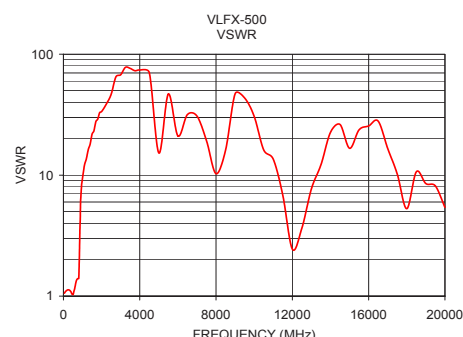
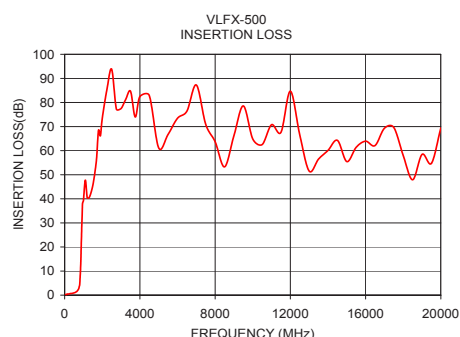


Functional Schematic



Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.29	1.06
150	0.38	1.11
375	0.71	1.10
500	0.94	1.03
575	1.17	1.13
650	1.53	1.29
750	2.70	1.39
820	7.04	1.70
900	25.98	6.19
1100	47.73	12.07
2000	73.43	33.59
3000	77.47	67.57
4000	82.46	74.00
5000	61.14	15.25
7500	70.97	19.22
10000	64.81	30.61
12500	66.48	3.65
15000	55.46	16.68
17500	69.61	10.20
20000	69.43	5.42



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED
IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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