# ow Pass Filter

# LFX-450

## DC to 450 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
ni rowei iliput	1000 Illax. 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

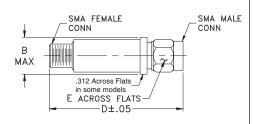
CASE STYLE: FF1118

Connectors	Model	Price	Qty.	
SMA	VLFX-450	\$39.95 ea.	(1-9)	

+RoHS Compliant

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

#### **Outline Drawing**



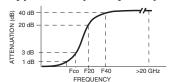
# Outline Dimensions (inch)

wt.	E	D	В
grams	.312	2.67	.410
17.0	7 92	67.82	10 /1

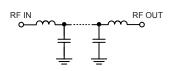
### Low Pass Filter Electrical Specifications @ 25°C

				•				
MODEL NO.	PASSBAND (MHz)	Fco, MHz STOPBAND (MHz) VSWR (:1) (Loss, dB)		NO. OF SECTIONS	]			
	(Loss < 1.2dB) Max.	(Loss 3 dB) Typ	F20 Min.	F40 Typ.	Stopband Typ.	Passband Typ.		
VLFX-450	DC-450	640	800	900-20000	10	1.15	21	1

#### **Typical Frequency Response**

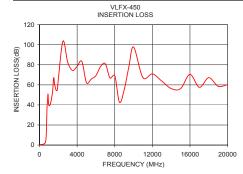


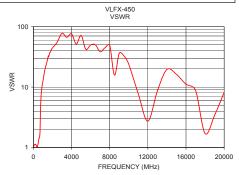
#### **Functional Schematic**



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
50	0.31	1.06	
175	0.45	1.13	
300	0.71	1.09	
450	1.00	1.09	
500	1.21	1.18	
575	1.84	1.38	
640	2.93	1.45	
685	5.85	1.71	
780	30.23	5.85	
850	42.71	8.60	
900	50.99	10.10	
2000	65.26	44.38	
4000	78.45	76.01	
6000	69.29	49.69	
8000	69.23	49.14	
10000	97.72	23.84	
12000	70.90	2.73	
16000	70.44	11.13	
18000	67.17	1.71	
20000	60.16	8.17	





**Mini-Circuits** 

For detailed performance specs & shopping online see web site

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