

# Low Pass Filter

## VLFX-450

50Ω 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

\*Passband rating, derate linearly to 3.5W at 100°C ambient.

### 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

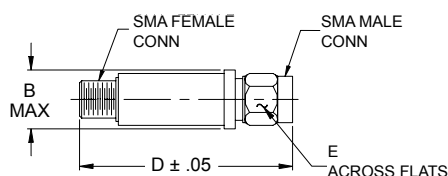
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



CASE STYLE: FF1118

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

### Outline Drawing



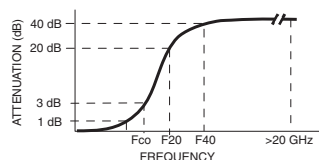
### Outline Dimensions (inch mm)

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

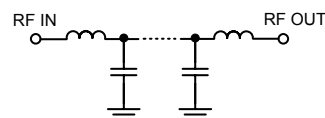
### Low Pass Filter Electrical Specifications @ 25°C

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

### Typical Frequency Response

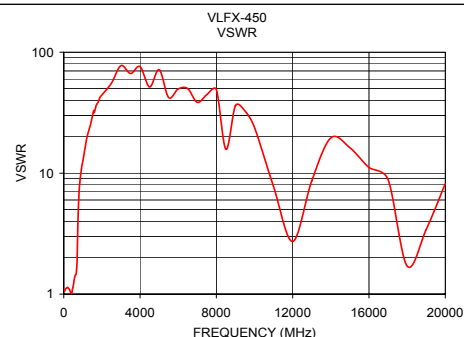
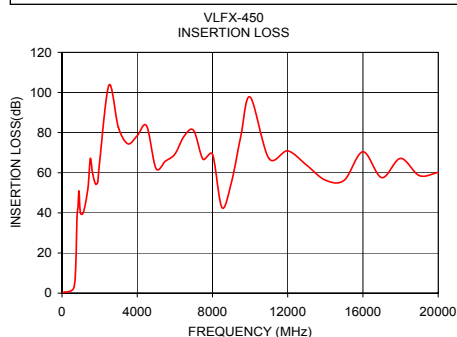


### Functional Schematic



### 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



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RF/MICROWAVE COMPONENTS

REV. B  
M100741  
VLFX-450  
EDU-0399  
ED-11930A/6  
URJ/AD/CP  
080916  
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