

# Low Pass Filter

## VLFX-400

50Ω DC to 400 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

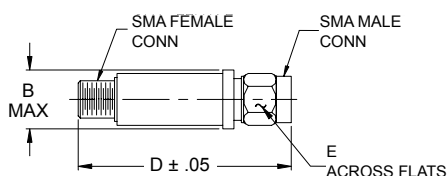
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-400	\$39.95 ea.	(1-9)

### Outline Drawing



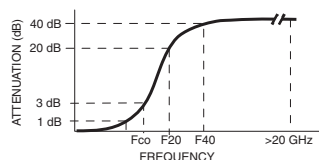
### Outline Dimensions (inch/mm)

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

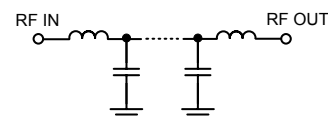
### Low Pass Filter Electrical Specifications @ 25°C

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-400	DC-400	540	670	700-20000	10	1.15	21

### Typical Frequency Response

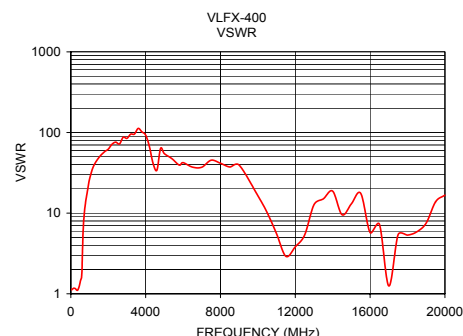
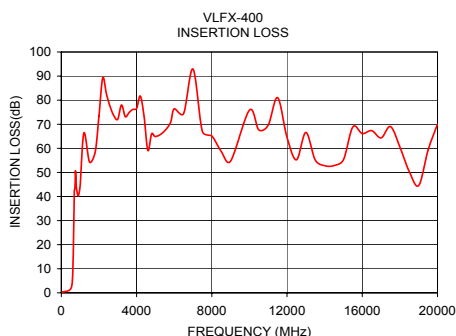


### Functional Schematic



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.22	1.12
100	0.38	1.15
200	0.55	1.17
400	0.97	1.15
450	1.23	1.24
500	1.67	1.39
540	2.42	1.51
600	6.73	2.09
670	32.49	6.86
700	42.85	8.74
800	43.74	14.22
1000	44.36	26.35
3000	72.09	84.69
5000	64.87	54.70
7500	67.01	45.36
10000	75.88	16.45
12500	55.24	5.36
15000	55.32	13.07
17500	69.03	5.42
20000	70.03	16.72



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RF/IF MICROWAVE COMPONENTS

REV. A  
M97025  
VLFX-400  
EDU-0399  
ED-11930A/3  
UR/JAD/CP  
080916  
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