

# Low Pass Filter

## VLFX-470

50Ω DC to 470 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

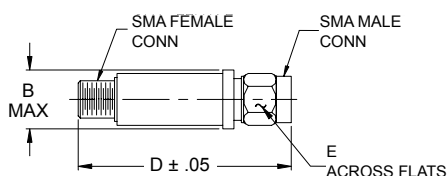
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-470	\$39.95 ea.	(1-9)

### Outline Drawing



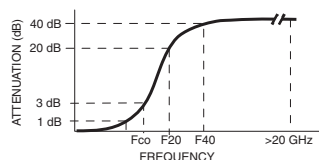
### Outline Dimensions (inch mm)

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

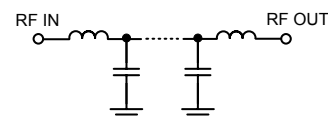
### Low Pass Filter Electrical Specifications @ 25°C

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-470	DC-470	675	820	1000-20000	10	1.15	21

### Typical Frequency Response

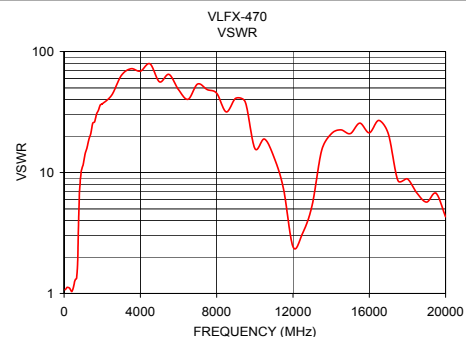
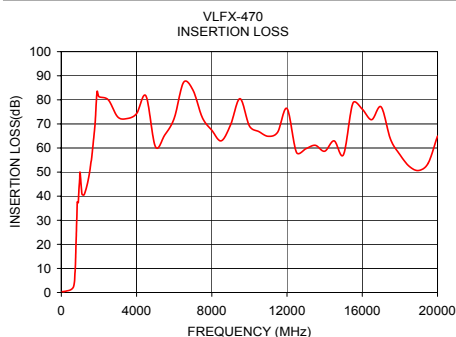


### Functional Schematic



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.39	1.07
150	0.39	1.12
320	0.72	1.08
470	1.03	1.10
520	1.23	1.18
575	1.57	1.28
675	3.47	1.49
740	9.89	2.85
820	30.11	7.38
925	40.83	10.64
975	47.08	11.29
1000	49.80	11.57
2500	79.98	43.65
5000	60.62	56.18
7500	72.60	48.49
10000	69.11	15.82
12500	58.22	3.13
15000	57.24	20.96
17500	63.67	8.59
20000	64.93	4.31



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RF/IF MICROWAVE COMPONENTS

REV. OR  
M97278  
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EDU-0399  
ED-11930A/7  
URJ/AD/CP  
080916  
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