

# Low Pass Filter

## VLFX-650

50Ω DC to 650 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

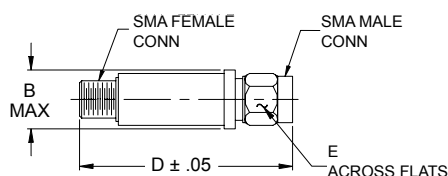
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-650	\$39.95 ea.	(1-9)

### Outline Drawing



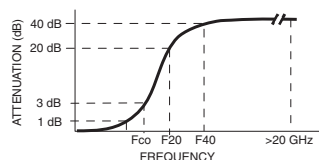
### Outline Dimensions (inch/mm)

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

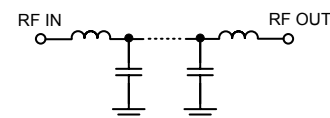
### Low Pass Filter Electrical Specifications @ 25°C

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-650	DC-650	1025	1275	1450-20000	10	1.2	21

### Typical Frequency Response

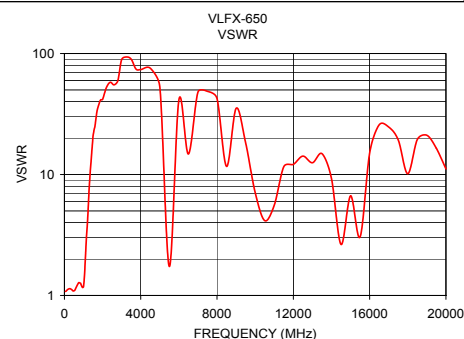
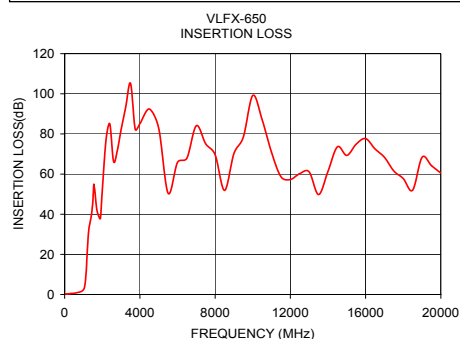


### Functional Schematic



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.29	1.08
200	0.39	1.13
400	0.54	1.11
650	0.89	1.20
800	1.22	1.27
900	1.57	1.20
1025	2.92	1.32
1125	9.11	2.42
1275	31.28	6.45
1450	41.47	16.47
1575	53.44	24.07
2000	51.81	41.80
3000	82.03	89.22
5000	82.92	52.93
7500	75.09	48.67
10000	99.20	7.09
12500	60.25	14.19
15000	69.31	6.64
17500	61.54	19.28
20000	60.47	11.14



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RF/IF MICROWAVE COMPONENTS

REV. B  
M101108  
VLFX-650  
EDU-0399  
ED-11930A/11  
URJ/AD/CP  
080916  
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