

# Low Pass Filter

## VLFX-300

50Ω DC to 300 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



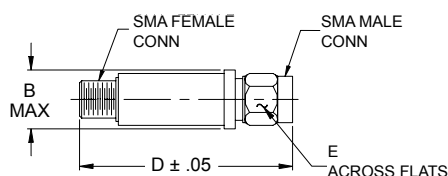
CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-300	\$39.95 ea.	(1-9)

### Applications

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

### Outline Drawing



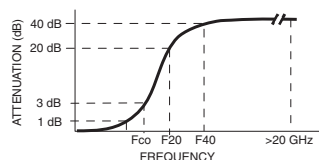
### Outline Dimensions (inch mm)

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

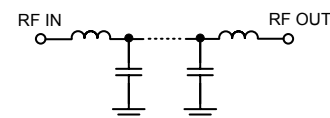
### Low Pass Filter Electrical Specifications @ 25°C

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-300	DC-300	450	580	650-20000	10	1.15	21

### Typical Frequency Response

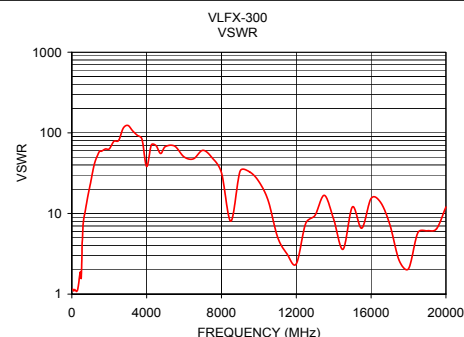
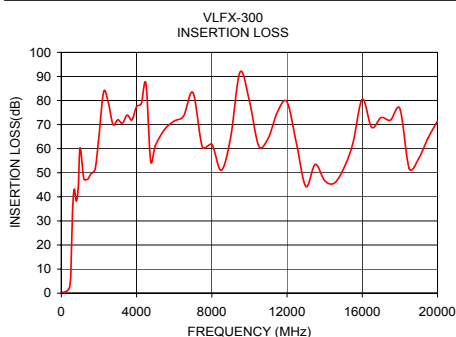


### Functional Schematic



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.38	1.16
100	0.39	1.09
200	0.64	1.11
300	0.95	1.11
350	1.21	1.28
400	1.79	1.58
450	2.85	1.88
500	6.46	1.56
580	29.41	5.57
650	41.12	8.93
800	38.18	13.79
900	44.02	18.40
1000	60.37	23.84
2500	79.10	80.35
5000	61.32	67.53
7500	60.77	49.08
10000	79.72	24.86
12500	62.16	7.48
15000	51.60	12.04
20000	71.48	12.03



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