Coaxial

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

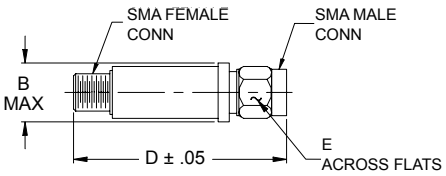
CASE STYLE: FF1118

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

Applications

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

Outline Drawing



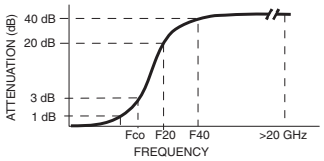
Outline Dimensions (inch / mm)

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

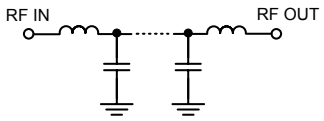
Low Pass Filter Electrical Specifications @ 25°C

MODEL NO.	PASSBAND (MHz) (Loss < 1.2dB) Max.	Fco, MHz Nom (Loss 3 dB) Typ	STOPBAND (MHz) (Loss, dB) F20 Min.	STOPBAND (MHz) (Loss, dB) F40 Typ.	VSWR (:1) Stopband Typ.	VSWR (:1) Passband Typ.	NO. OF SECTIONS
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