## **Low Pass Filter**

## $50\Omega$ 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. Permanent damage may occur if any of these limits are exceeded.

#### **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

# **VLFX-650+ VLFX-650**



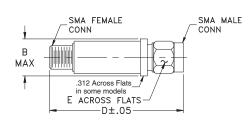
CASE STYLE: FF1118

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

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

#### **Outline Drawing**



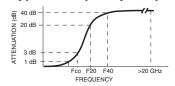
#### Outline Dimensions (inch)

wt.	E	D	В
grams	.312	2.67	.410
17.0	7 92	67.82	10 /1

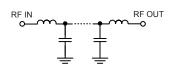
### Low Pass Filter Electrical Specifications @ 25°C

MODEL NO.				VSWR (:1)		NO. OF SECTIONS	
	(Loss < 1.2dB) Max.	(Loss 3 dB) Typ	F20 Min.	F40 Typ.	Stopband Typ.	Passband Typ.	
VLFX-650 (+)	DC-650	1025	1275	1450-20000	10	1.2	21

#### **Typical Frequency Response**

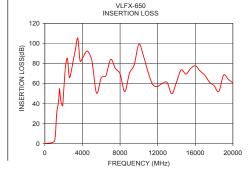


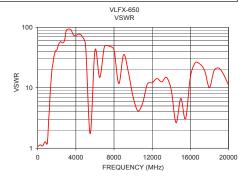
#### **Functional Schematic**



#### 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





Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs

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