# ow Pass Filter

## **VLFX-1100**

## DC to 1100 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

Permanent damage may occur if any of these limits are exceeded.

### \*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

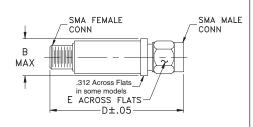
CASE STYLE: FF1118

Connectors	Model	Price	Qty.	
SMA	VLFX-1100	\$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.	F	D	В
	_		_
grams	.312	2.67	.410
17.0	7 02	67.82	10 /11

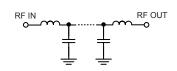
#### Low Pass Filter Electrical Specifications @ 25°C

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MODEL NO.	PASSBAND (MHz)					NO. OF SECTIONS		
	(Loss < 1.2dB) Max.	(Loss 3 dB) Typ	F20 Min.	F40 Typ.	Stopband Typ.	Passband Typ.		
VLFX-1100	DC-1100	1750	2070	2300-20000	10	1.4	21	1

#### **Typical Frequency Response**

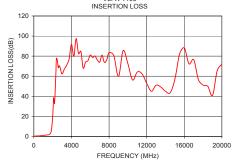
## 20 dB 1 dB Fco F20 FREQUENCY

#### **Functional Schematic**

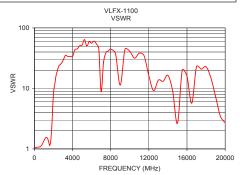


#### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
50	0.31	1.06	
350	0.40	1.07	
700	0.69	1.12	
1100	1.03	1.46	
1200	1.24	1.54	
1400	1.42	1.47	
1600	1.68	1.13	
1750	2.92	1.66	
1900	8.30	4.14	
2070	31.74	10.16	
2300	52.14	17.07	
3000	62.27	28.86	
4000	91.73	33.84	
5000	84.76	52.10	
7500	73.80	39.07	
10000	72.42	41.17	
12500	44.93	9.18	
15000	57.16	2.65	
17500	56.53	20.82	
20000	72.04	2.69	



VLFX-1100



**Mini-Circuits** 

For detailed performance specs & shopping online see web site

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