

Low Pass Filter

VLFX-950+

50Ω DC to 950 MHz (40 dB Typ. Isolation up to 20 GHz)



Generic photo used for illustration purposes only

CASE STYLE: FF1118

Connectors Model

SMA VLFX-950+

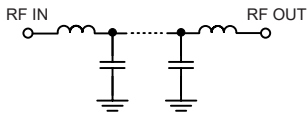
Features

- Very good isolation, 40 dB typ. up to 20 GHz
- Excellent power handling, 10W
- Temperature stable LTCC internal structure
- Re-entry frequency > 20 GHz
- Protected by US patent 6,943,646
- Rugged unibody construction

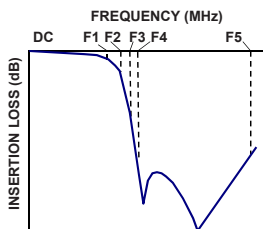
Applications

- Harmonic rejection
- Transmitters/receivers
- Lab use
- Test instrumentation

Functional Schematic



Typical Frequency Response



Electrical Specifications⁽¹⁾ at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-950	—	1.1	1.6 dB
	Freq. Cut-Off	F2	1400	—	3.0	dB
	VSWR	DC-F1	DC-950	—	1.4	:1
Stop Band	Insertion Loss	F3	1865	20	30	dB
		F4-F5	2250-20000	—	40	dB
	VSWR	F3-F5	1865-20000	—	10	:1

(1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max.

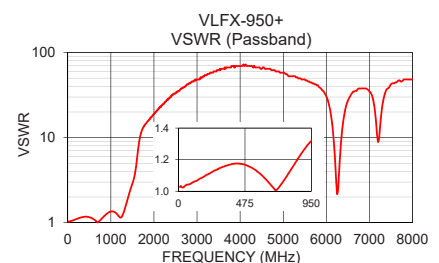
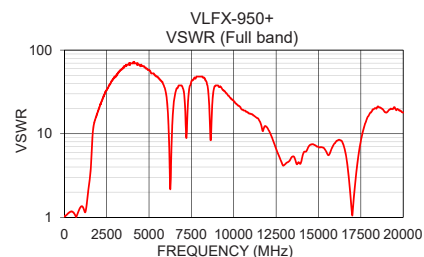
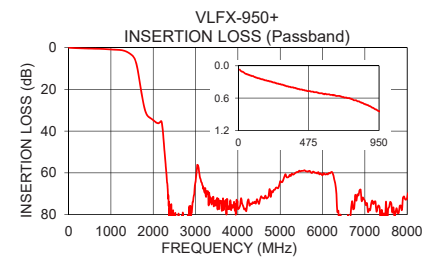
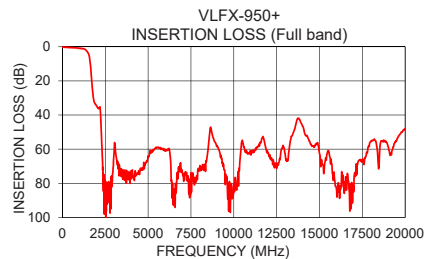
*Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.07	1.03
500	0.48	1.16
950	0.84	1.32
1400	2.28	1.98
1500	3.70	2.88
1650	12.65	8.43
1710	20.09	11.77
1750	24.84	13.09
1810	30.23	14.50
1865	32.65	15.81
2500	93.97	33.42
5000	64.02	57.91
7500	73.79	42.38
10000	80.21	24.48
12500	71.37	6.63
15000	62.48	6.97
17500	66.61	8.12
18000	55.44	17.05
19000	58.39	17.93
20000	47.94	17.93

+RoHS Compliant

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



Notes

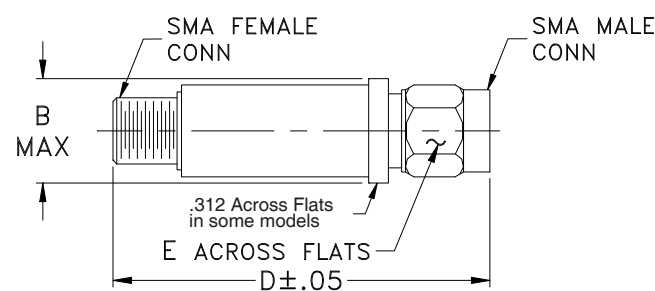
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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing



Outline Dimensions (inch mm)

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

Note: Please refer to case style drawing for details

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