

Low Pass Filter

VLFX-1100+

50Ω DC to 1100 MHz (40 dB Typ. Isolation up to 20 GHz)



Generic photo used for illustration purposes only

CASE STYLE: FF1118

Connectors Model

SMA VLFX-1100+

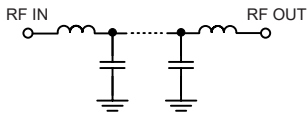
Features

- 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

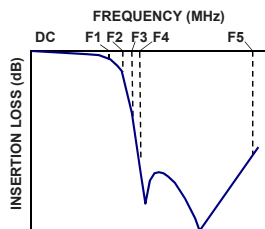
Applications

- 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-1100	—	1.1	1.6 dB
	Freq. Cut-Off	F2	1750	—	3.0	dB
	VSWR	DC-F1	DC-1100	—	1.4	:1
Stop Band	Insertion Loss	F3	2070	20	28	dB
		F4-F5	2300-20000	—	40	dB
	VSWR	F3-F5	2070-20000	—	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.

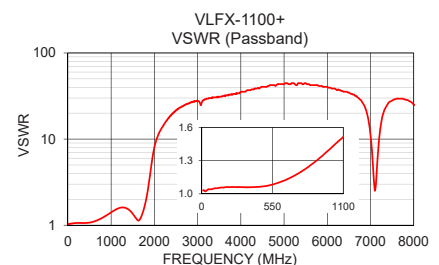
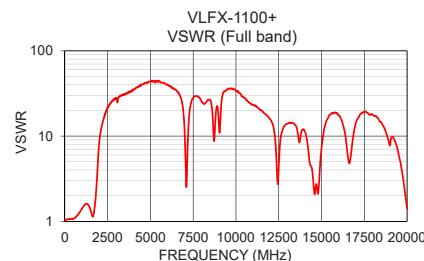
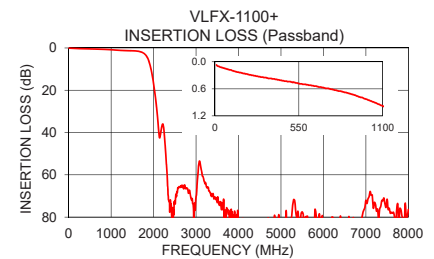
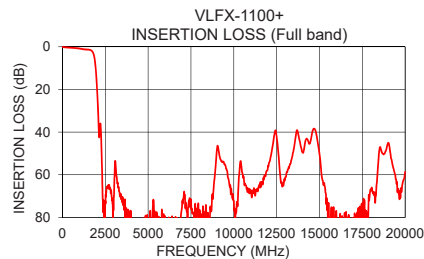
*Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	0.07	1.03
500	0.45	1.07
1100	0.98	1.51
1750	2.28	1.50
1800	3.02	1.89
2000	16.91	8.01
2020	19.71	8.86
2050	24.42	9.96
2070	28.02	10.56
2080	29.97	10.89
2300	54.66	16.89
4000	103.83	35.46
5000	84.68	43.44
7500	71.55	28.03
10000	72.22	34.07
12500	41.81	4.30
15000	49.99	7.25
17500	74.24	19.11
19000	45.20	7.73
20000	58.68	1.42

+RoHS Compliant

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



Notes

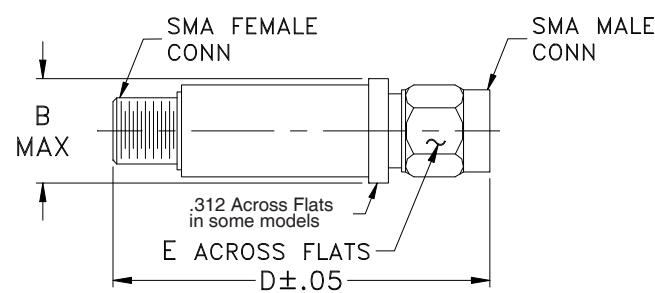
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Coaxial Connections

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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