

Coaxial

Low Pass Filter

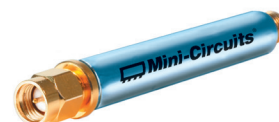
VLFX-2500+

50Ω

DC to 2500 MHz (30 dB Isolation up to 20 GHz)

The Big Deal

- Very good rejection, 30 dB up to 20 GHz
- Excellent power handling, 9W
- Rugged unibody construction



Generic photo used for illustration purposes only

CASE STYLE: FF1118

Product Overview

VLFX-2500+ is a 50Ω low pass filter built in rugged unibody construction. Covering DC-2500 MHz bandwidth, these units offer good matching within the passband and high rejection in stopband, 30 dB up to 20 GHz. This will find its applications in harmonic rejection, transmitters / receivers and test instrumentation.

Key Features

| Feature | Advantages |
|-----------------------------|---|
| Low passband insertion loss | Suitable for high performance application |
| Fast roll-off | Provides very good adjacent band rejection |
| Connectorized package | The connectorized package is easy to interface with other devices and well suited for test setups |

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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VLFX-2500+

50Ω DC to 2500 MHz (30 dB Isolation up to 20 GHz)



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| Connectors | Model |
|------------|------------|
| SMA | VLFX-2500+ |

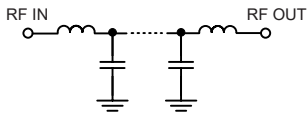
Features

- Very good isolation, 30 dB up to 20 GHz
- Excellent power handling, 9W
- 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



Maximum Ratings

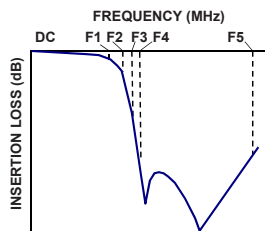
| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 9W max. |

*Passband rating, derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25°C

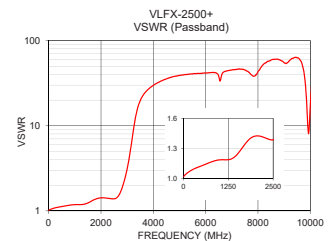
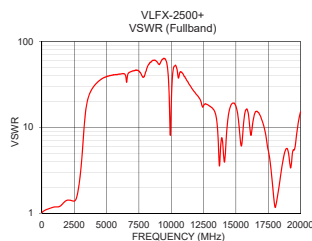
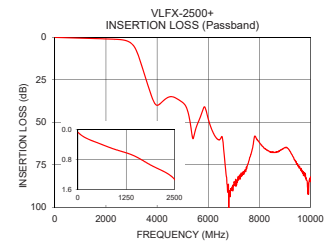
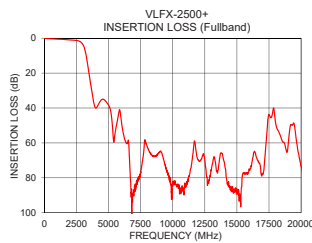
| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 10 | 0.08 | 1.02 |
| 100 | 0.16 | 1.05 |
| 1000 | 0.54 | 1.18 |
| 2500 | 1.32 | 1.39 |
| 2950 | 3.15 | 2.66 |
| 3075 | 4.91 | 4.12 |
| 3250 | 10.12 | 9.35 |
| 3475 | 20.39 | 18.97 |
| 3675 | 29.87 | 24.33 |
| 3700 | 31.01 | 24.85 |
| 3800 | 35.38 | 26.73 |
| 5850 | 40.94 | 41.18 |
| 6800 | 102.61 | 43.98 |
| 7850 | 58.69 | 38.24 |
| 10000 | 82.20 | 17.62 |
| 11700 | 58.87 | 27.00 |
| 15275 | 93.00 | 9.20 |
| 17850 | 40.02 | 2.02 |
| 19500 | 50.70 | 5.43 |
| 20000 | 73.45 | 15.14 |

Typical Frequency Response



+RoHS Compliant

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



Notes

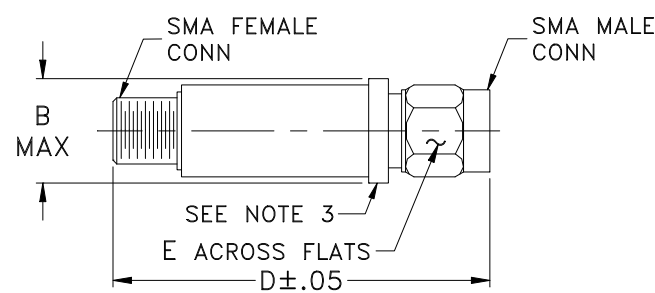
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Coaxial Connections

| | |
|--------|------------|
| INPUT | SMA-Female |
| OUTPUT | SMA-Male |

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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