

Coaxial Low Pass Filter

50Ω

*DC to 3000 MHz

VLF-3000+



CASE STYLE: FF704

| Connectors | Model |
|------------|-----------|
| SMA | VLF-3000+ |

+RoHS Compliant

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

Maximum Ratings

| | |
|----------------------------|-------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 10W max. at 25°C |
| DC Current Input to Output | 0.5A 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

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 10W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

Applications

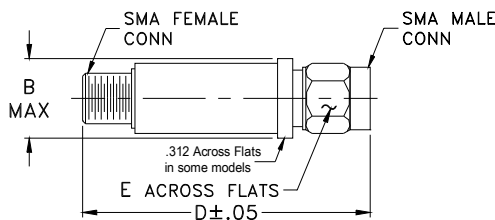
- harmonic rejection
- transmitters/receivers
- lab use

Electrical Specifications at 25°C

| PASSBAND (MHz) (loss < 1.2 dB) | fco, MHz Nom. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|--------------------------------------|------------------|-------------------------------|------------|---------------|------------------|------------------|--------------------|
| | | f 20 Min. | 30 Typ. | fr 20 Typ. | Stopband Typ. | Passband Typ. | |
| Max. | Typ. | | | | | | |
| *DC-3000 | 3600 | 4550 | 4780-7500 | 10000 | 20 | 1.2 | 7 |

* Not for use with DC voltage at input and output ports

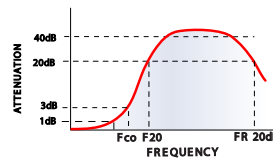
Outline Drawing



Outline Dimensions (inch/mm)

| B | D | E | wt |
|-------|-------|------|-------|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10.0 |

typical frequency response

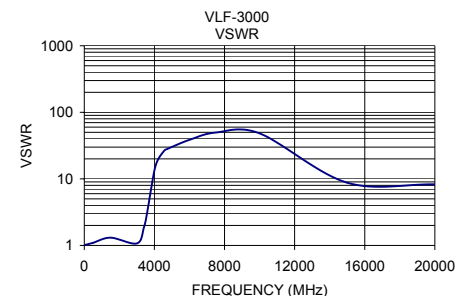
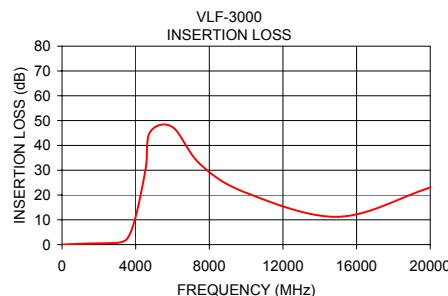


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|--------------------|------------------------|--------------|
| 50 | 0.06 | 1.02 |
| 500 | 0.17 | 1.09 |
| 1500 | 0.41 | 1.31 |
| 3000 | 0.72 | 1.07 |
| 3400 | 1.51 | 1.86 |
| 3600 | 3.08 | 3.27 |
| 3800 | 6.38 | 6.83 |
| 4100 | 14.30 | 16.72 |
| 4550 | 31.05 | 26.33 |
| 4780 | 45.38 | 28.49 |
| 6000 | 47.38 | 38.61 |
| 7500 | 32.41 | 49.64 |
| 10000 | 20.88 | 48.26 |
| 15000 | 11.22 | 8.77 |
| 20000 | 23.02 | 8.27 |



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.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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