

Coaxial Low Pass Filter

50Ω

*DC to 1700 MHz

VLF-1700+



CASE STYLE: FF704

| Connectors | Model |
|------------|-----------|
| SMA | VLF-1700+ |

+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

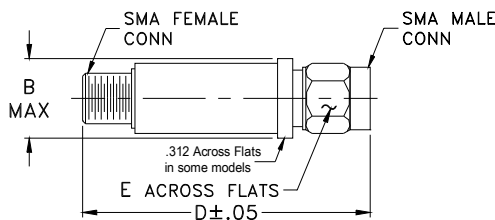
- harmonic rejection
- transmitters/receivers
- lab use

Electrical Specifications at 25°C

| PASSBAND (MHz) (loss < 1.2 dB) | fco, MHz Nom. (loss 3 dB) | 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-1700 | 2050 | 2375 | 2500-6500 | 7000 | 20 | 1.2 | 7 |

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

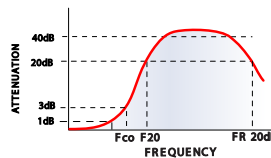
Outline Drawing



Outline Dimensions (inch/mm)

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

typical frequency response

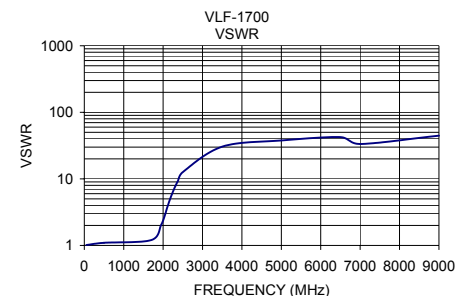
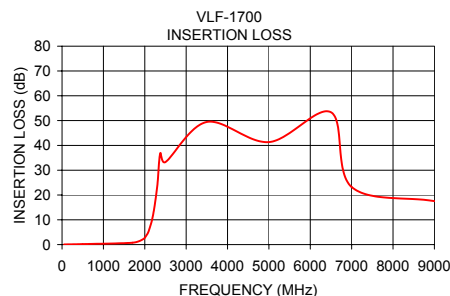


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|--------------------|------------------------|--------------|
| 50 | 0.05 | 1.01 |
| 500 | 0.21 | 1.09 |
| 1700 | 0.77 | 1.20 |
| 1950 | 2.11 | 2.03 |
| 2050 | 3.98 | 2.91 |
| 2100 | 5.73 | 3.64 |
| 2200 | 11.93 | 5.44 |
| 2300 | 23.47 | 7.53 |
| 2375 | 36.86 | 9.28 |
| 2500 | 33.29 | 12.61 |
| 3500 | 49.47 | 30.49 |
| 5000 | 41.34 | 37.77 |
| 6500 | 53.35 | 42.38 |
| 7000 | 23.20 | 33.42 |
| 9000 | 17.55 | 44.55 |



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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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