

Coaxial Low Pass Filter

50Ω

*DC to 1450 MHz

VLF-1450+
VLF-1450



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

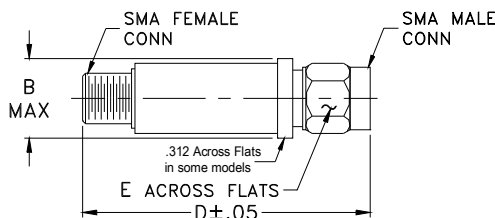
CASE STYLE: FF704

| Connectors | Model | Price | Qty. |
|------------|-------------|-------------|-------|
| SMA | VLF-1450(+) | \$21.95 ea. | (1-9) |

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch/mm)

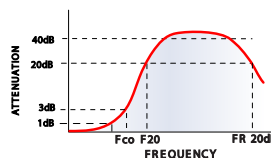
| B | D | E | wt |
|-------|-------|------|-------|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10.0 |

Electrical Specifications at 25°C

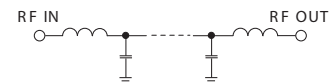
| PASSBAND (MHz) | fco, MHz Nom. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|----------------|---------------|----------------------------|-----------|-------|-----------|----------|-----------------|
| (loss < 1 dB) | (loss 3 dB) | f 20 | 30 | fr 20 | Stopband | Passband | |
| Max. | Typ. | Min. | Typ. | Typ. | Typ. | Typ. | |
| *DC-1450 | 1825 | 2025 | 2050-6600 | 6700 | 20 | 1.2 | 7 |

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

typical frequency response

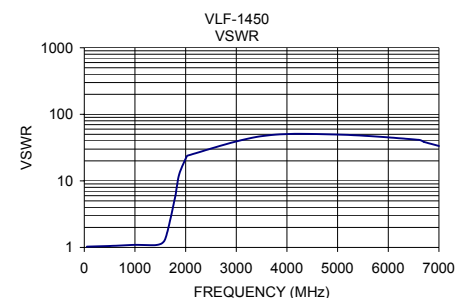
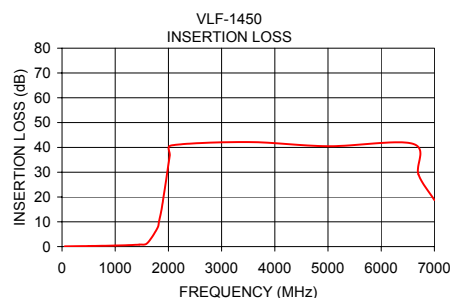


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 0.09 | 1.03 |
| 500 | 0.22 | 1.05 |
| 1000 | 0.41 | 1.09 |
| 1450 | 0.79 | 1.10 |
| 1600 | 1.36 | 1.35 |
| 1790 | 7.31 | 5.59 |
| 1825 | 10.28 | 8.08 |
| 1880 | 16.05 | 13.09 |
| 2025 | 36.64 | 23.49 |
| 2050 | 40.77 | 24.14 |
| 3500 | 42.15 | 46.96 |
| 5000 | 40.48 | 49.64 |
| 6600 | 41.43 | 41.37 |
| 6700 | 29.08 | 38.61 |
| 7000 | 18.74 | 33.42 |



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ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine www.minicircuits.com Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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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