

Coaxial Low Pass Filter

50Ω

*DC to 530 MHz

VLF-530+
VLF-530

Maximum Ratings

| | |
|----------------------------|-------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 8.5W 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, 8.5W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

Applications

- harmonic rejection
- transmitters/receivers
- lab use



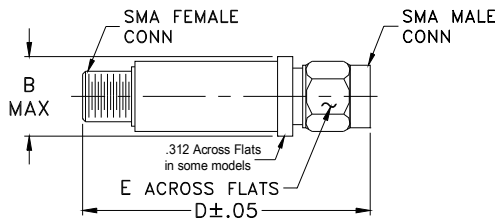
CASE STYLE: FF704

| Connectors | Model | Price | Qty. |
|------------|------------|-------------|-------|
| SMA | VLF-530(+) | \$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)

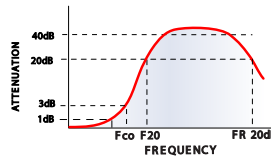
| B | D | E | wt |
|-------|-------|------|-------|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10.0 |

Electrical Specifications at 25°C

| PASSBAND (MHz) | fco, MHz Nom. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|-----------------|---------------|----------------------------|----------|-------|-----------|----------|-----------------|
| (loss < 1.2 dB) | (loss 3 dB) | f 20 | 40 | fr 20 | Stopband | Passband | |
| Max. | Typ. | Min. | Typ. | Typ. | Typ. | Typ. | |
| *DC-530 | 700 | 820 | 945-3000 | 6000 | 20 | 1.2 | 7 |

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

typical frequency response

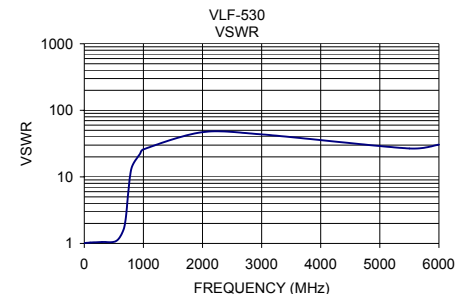
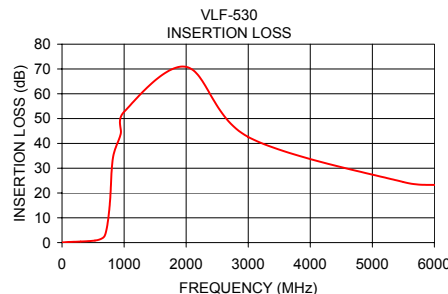


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1 | 0.05 | 1.01 |
| 100 | 0.22 | 1.03 |
| 300 | 0.41 | 1.05 |
| 530 | 0.83 | 1.08 |
| 650 | 1.78 | 1.50 |
| 700 | 3.52 | 2.31 |
| 740 | 8.75 | 5.42 |
| 775 | 17.33 | 10.43 |
| 820 | 34.05 | 15.13 |
| 945 | 43.81 | 22.29 |
| 1000 | 52.72 | 25.94 |
| 2000 | 70.84 | 46.96 |
| 3000 | 42.58 | 43.44 |
| 5500 | 24.42 | 26.74 |
| 6000 | 23.25 | 30.49 |



Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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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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