

# Coaxial Low Pass Filter

50Ω

\*DC to 2250 MHz

## VLF-2250+ VLF-2250



CASE STYLE: FF704

|            |             |
|------------|-------------|
| Connectors | Model       |
| SMA        | VLF-2250(+) |

**+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

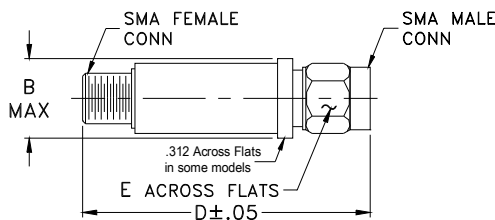
- harmonic rejection
- transmitters/receivers
- lab use

### Electrical Specifications at 25°C

| PASSBAND<br>(MHz)<br>(loss < 1.2 dB) | fco, MHz<br>Nom.<br>(loss 3 dB) | STOP BAND (MHz)<br>(loss, dB) |            |               | VSWR (:1)        |                  | NO. OF<br>SECTIONS |
|--------------------------------------|---------------------------------|-------------------------------|------------|---------------|------------------|------------------|--------------------|
|                                      |                                 | f 20<br>Min.                  | 30<br>Typ. | fr 20<br>Typ. | Stopband<br>Typ. | Passband<br>Typ. |                    |
| Max.                                 | Typ.                            | Min.                          | Typ.       | Typ.          | Typ.             | Typ.             |                    |
| *DC-2200                             | 2575                            | 2900                          | 3000-5000  | 7200          | 20               | 1.2              | 7                  |

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

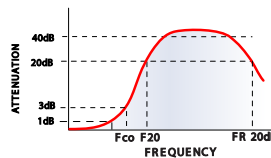
### Outline Drawing



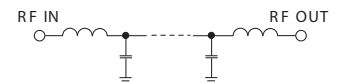
### Outline Dimensions (inch/mm)

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

### typical frequency response

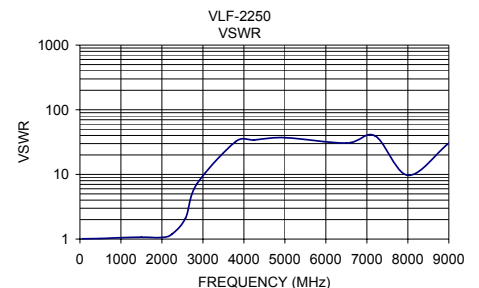


### electrical schematic



### Typical Performance Data at 25°C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR<br>(:1) |
|--------------------|------------------------|--------------|
| 50.00              | 0.06                   | 1.01         |
| 500.00             | 0.11                   | 1.02         |
| 1000.00            | 0.15                   | 1.05         |
| 1500.00            | 0.33                   | 1.07         |
| 2000.00            | 0.51                   | 1.06         |
| 2250.00            | 0.82                   | 1.20         |
| 2575.00            | 2.84                   | 2.10         |
| 2850.00            | 24.55                  | 7.08         |
| 3800.00            | 48.40                  | 32.18        |
| 4250.00            | 37.39                  | 34.07        |
| 5000.00            | 33.16                  | 36.97        |
| 6500.00            | 37.38                  | 30.49        |
| 7200.00            | 30.64                  | 39.49        |
| 8000.00            | 7.60                   | 9.69         |
| 9000.00            | 14.79                  | 30.49        |



### 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.
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Page 1 of 1