

# Coaxial Low Pass Filter

50Ω

\*DC to 2750 MHz

VLF-2750+



CASE STYLE: FF704

| Connectors | Model     |
|------------|-----------|
| SMA        | VLF-2750+ |

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

## Applications

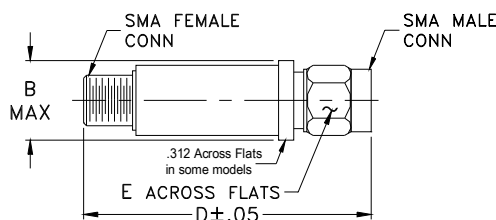
- harmonic rejection
- transmitters/receivers
- lab use

## Electrical Specifications at 25°C

| PASSBAND<br>(MHz)<br>(loss < 1 dB) | f <sub>co</sub> , 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.                                         |                               |            |               |                  |                  |                    |
| *DC-2750                           | 3150                                         | 4000                          | 4150-6800  | 8400          | 20               | 1.2              | 7                  |

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

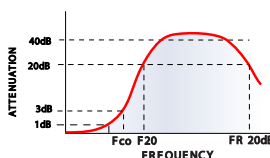
## Outline Drawing



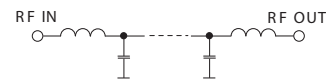
## Outline Dimensions (inch/mm)

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

## typical frequency response

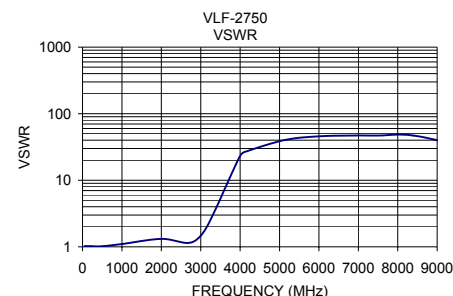
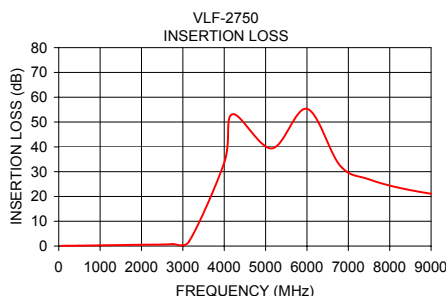


## electrical schematic



## Typical Performance Data at 25°C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR<br>(:1) |
|--------------------|------------------------|--------------|
| 50                 | 0.08                   | 1.03         |
| 200                | 0.13                   | 1.02         |
| 500                | 0.18                   | 1.02         |
| 1000               | 0.28                   | 1.10         |
| 2000               | 0.54                   | 1.32         |
| 2750               | 0.79                   | 1.16         |
| 3150               | 1.83                   | 1.97         |
| 4000               | 33.61                  | 23.18        |
| 4200               | 53.15                  | 27.59        |
| 5150               | 39.36                  | 40.41        |
| 6000               | 55.34                  | 45.72        |
| 6800               | 32.46                  | 46.96        |
| 7500               | 26.91                  | 46.96        |
| 8400               | 22.87                  | 46.96        |
| 9900               | 18.62                  | 29.96        |



## 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.  
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