# Low Pass Filter

# $50\Omega$

# \*DC to 2750 MHz

#### **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 |  |  |

<sup>\*</sup> 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

- protected by U.S. Patent 6,943,646

- temperature stable
- · low cost

# +RoHS Compliant

Model

VLF-2750+

Generic photo used for illustration purposes only

CASE STYLE: FF704

Connectors

SMA

VLF-2750+

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

### **Applications**

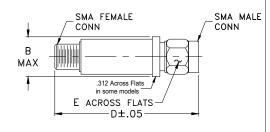
- harmonic rejection
- transmitters/receivers
- lab use

# Electrical Specifications at 25°C

| PASSBAND<br>(MHz) | fco, MHz<br>Nom. | STOP BAND (MHz)<br>(loss, dB) |           |       | VSWR<br>(:1) |          | NO. OF<br>SECTIONS |
|-------------------|------------------|-------------------------------|-----------|-------|--------------|----------|--------------------|
| (loss < 1 dB)     | (loss 3 dB)      | F 20                          | 30        | Fr 20 | Stopband     | Passband |                    |
| Max.              | Тур.             | Min.                          | Тур.      | Тур.  | Тур.         | Тур.     |                    |
| *DC-2750          | 3150             | 4000                          | 4150-6800 | 8400  | 20           | 1.2      | 7                  |

<sup>\*</sup> Not for use with DC voltage at input and output ports

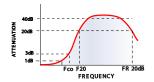
# **Outline Drawing**



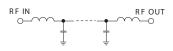
### Outline Dimensions (inch)

D F wt .410 1.43 .312 grams 10.41 36.32 7.92 10.0

### typical frequency response

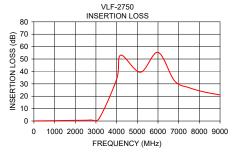


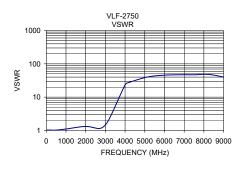
#### electrical schematic



# 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        |





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.

C. 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