Low Pass Filter

 50Ω

*DC to 800 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 |

^{*} 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
- excellent power handling, 10W
- temperature stable
- · low cost
- protected by U.S. Patent 6,943,646

• 7 sections

+RoHS Compliant

Connectors

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

Generic photo used for illustration purposes only

CASE STYLE: FF704

Model

VLF-800+

VLF-800+

Applications

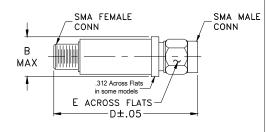
- harmonic rejection
- transmitters/receivers
- lab use

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. | Тур. | Min. | Тур. | Тур. | Тур. | Тур. | |
| *DC-800 | 1075 | 1275 | 1350-4850 | 5100 | 20 | 1.2 | 7 |

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

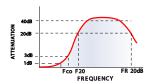
Outline Drawing



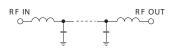
Outline Dimensions (inch)

В D Ε .410 1.43 .312 grams 10.41 36.32 7.92 10.0

typical frequency response



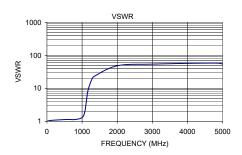
electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|--------------------|------------------------|--------------|
| 40 | | |
| 10 | 0.06 | 1.01 |
| 100 | 0.14 | 1.06 |
| 300 | 0.26 | 1.10 |
| 600 | 0.46 | 1.14 |
| 800 | 0.71 | 1.13 |
| 1000 | 1.66 | 1.29 |
| 1075 | 3.38 | 1.88 |
| 1120 | 7.07 | 3.86 |
| 1170 | 14.92 | 8.72 |
| 1275 | 29.63 | 18.30 |
| 1350 | 32.29 | 23.18 |
| 2000 | 38.01 | 48.26 |
| 3000 | 48.80 | 54.29 |
| 4850 | 47.41 | 57.91 |
| 5100 | 31.24 | 49.64 |





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