

Coaxial Low Pass Filter

VLF-105+

50Ω *DC to 105 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF704

| | |
|------------|----------|
| Connectors | Model |
| SMA | VLF-105+ |

+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* | 8.5W 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

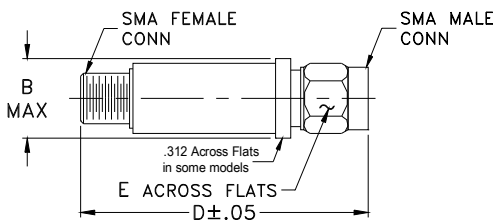
- harmonic rejection
- transmitters/receivers
- lab use

Electrical Specifications at 25°C

| PASSBAND (MHz) (loss < 1 dB) | f _{co} , MHz Nom. (loss 3 dB) | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|---------------------------------|--|-------------------------------|------------|---------------|------------------|------------------|-----------------|
| | | f 20 Min. | 40 Typ. | fr 20 Typ. | Stopband Typ. | Passband Typ. | |
| Max. | Typ. | Min. | Typ. | Typ. | Typ. | Typ. | 7 |
| *DC-105 | 180 | 250 | 265-1650 | 4750 | 20 | 1.2 | |

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

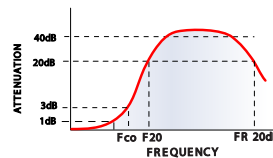
Outline Drawing



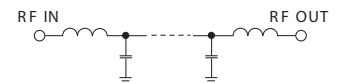
Outline Dimensions (inch/mm)

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

typical frequency response

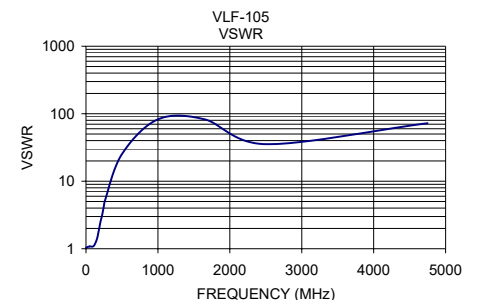
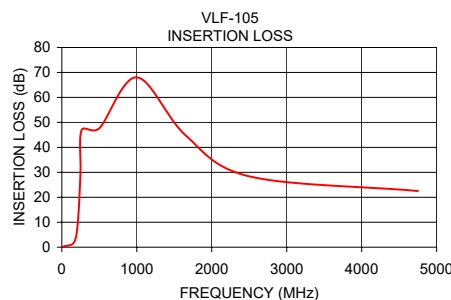


electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1 | 0.17 | 1.04 |
| 50 | 0.45 | 1.08 |
| 105 | 0.78 | 1.09 |
| 150 | 1.45 | 1.37 |
| 180 | 3.10 | 1.92 |
| 200 | 6.17 | 2.45 |
| 220 | 12.57 | 2.99 |
| 240 | 23.78 | 3.85 |
| 250 | 31.56 | 4.41 |
| 265 | 47.01 | 5.23 |
| 500 | 47.65 | 25.19 |
| 1000 | 68.04 | 82.73 |
| 1650 | 44.82 | 82.73 |
| 2500 | 28.37 | 35.46 |
| 4750 | 22.50 | 72.39 |



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.
- The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

