

Low Pass Filter

50Ω

*DC to 3400 MHz

VLF-3400+

Maximum Ratings

| | |
|----------------------------|-------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 8W at 25°C |
| DC Current Input to Output | 0.5A max. at 25°C |

*Passband rating, derate linearly to 3W at 100°C ambient
Permanent damage may occur if any of these limits are exceeded.

Features

- Rugged uni-body construction, small size
- 5 sections
- Excellent power handling, 8W
- Temperature stable
- Low cost
- Protected by US patent 6,943,646

Applications

- Point to point
- Harmonic rejection
- Transmitters/receivers
- Lab use



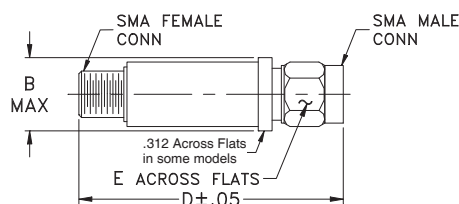
CASE STYLE: FF704

| Connectors | Model |
|------------|-----------|
| SMA | VLF-3400+ |

+RoHS Compliant

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

Outline Drawing



Outline Dimensions (inch mm)

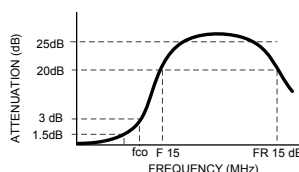
| B | D | E | wt. |
|-------|-------|------|-------|
| .410 | 1.43 | .312 | grams |
| 10.41 | 36.32 | 7.92 | 10 |

Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

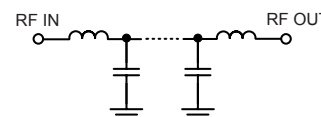
| PASSBAND (MHz) | f _{co} , MHz Nom. | STOP BAND (MHz) (loss, dB) | | | VSWR (:1) | | NO. OF SECTIONS |
|---------------------------------------|-------------------------------|-------------------------------|-------------|---------------|------------------|------------------|-----------------|
| | | F 20 Min. | 25 Typ. | FR 20 Typ. | Stopband Typ. | Passband Typ. | |
| *DC - 3400 (loss < 1.5 dB) Max. | 3950 Typ. | 4300 | 4600 - 7800 | 8300 | 17 | 1.2 | 5 |

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

Typical frequency response

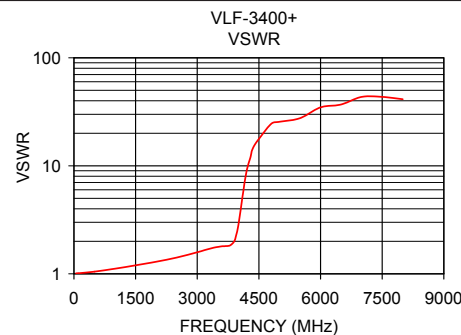
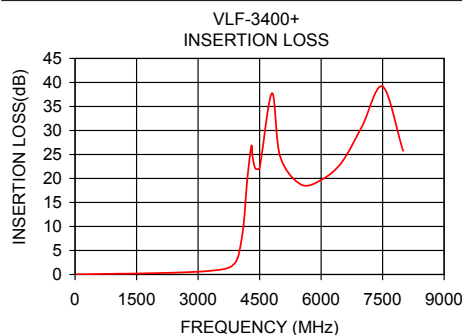


Electrical schematic



Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 40 | 0.01 | 1.01 |
| 100 | 0.03 | 1.01 |
| 500 | 0.08 | 1.05 |
| 1000 | 0.15 | 1.12 |
| 2000 | 0.29 | 1.29 |
| 3000 | 0.58 | 1.58 |
| 3400 | 0.85 | 1.74 |
| 3800 | 1.61 | 1.83 |
| 3950 | 3.15 | 2.29 |
| 4050 | 6.53 | 3.73 |
| 4150 | 13.83 | 6.91 |
| 4300 | 26.75 | 12.18 |
| 4600 | 24.94 | 20.45 |
| 5050 | 23.14 | 27.16 |
| 6500 | 23.33 | 36.97 |
| 7800 | 29.30 | 45.72 |
| 8300 | 21.56 | 35.46 |



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.
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



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