

High Pass Filter

50Ω 9000 to 13000 MHz

Maximum Ratings

| | |
|-----------------------|-----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 7W 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

- Low cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- DC block in/out, breakdown voltage, 1kV typ.

Application

- Sub-harmonic rejection and DC blocking
- Transmitters/Receivers
- Lab use
- Instrumentation
- Test equipment

VHF-8400+ VHF-8400



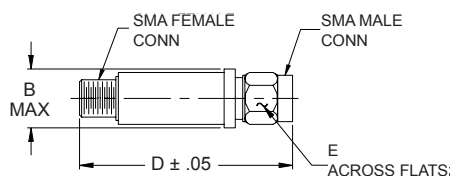
CASE STYLE: FF704

| Connectors | Model | Price | Qty. |
|------------|-----------|-------------|-------|
| SMA | VHF-8400 | \$24.95 ea. | (1-9) |
| SMA | VHF-8400+ | \$24.95 ea. | (1-9) |

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Outline Drawing



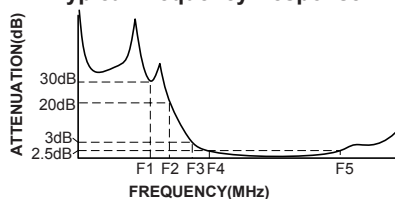
Outline Dimensions (Inch/mm)

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

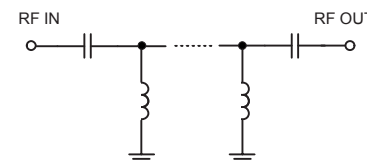
High Pass Filter Electrical Specifications (T_{AMB} = 25°C)

| STOPBAND (MHz) | | f _{co} , MHz | PASSBAND (MHz) | | VSWR | | NO. OF SECTIONS |
|----------------|-------------|-----------------------|----------------|------------|----------|-----------------|-----------------|
| (Loss>30dB) | (Loss>20dB) | Nom. | (Loss<2.5dB) | (Loss<3dB) | Typ. | Frequency (MHz) | |
| Typ. DC-F1 | Min. DC-F2 | Typ. F3 | Max. F4-F5 | Max. | Stopband | Frequency | |
| DC-5700 | DC-6000 | 8400 | 9500-13000 | 9000-13000 | 20:1 | 9000-13000 | 5 |

Typical Frequency Response



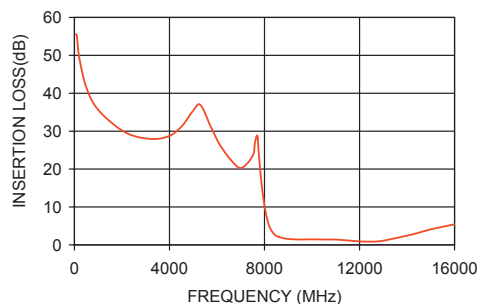
Electrical schematic



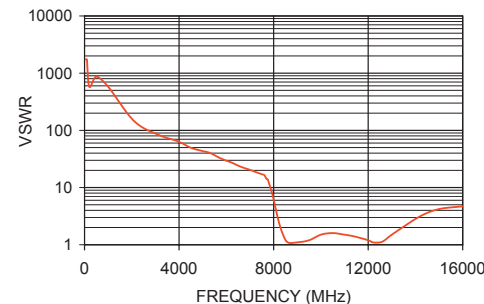
Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50 | 55.48 | 1737.18 |
| 500 | 41.57 | 868.59 |
| 4500 | 31.17 | 49.64 |
| 5700 | 36.69 | 31.60 |
| 6000 | 27.78 | 29.46 |
| 7500 | 23.46 | 17.05 |
| 8020 | 9.65 | 5.68 |
| 8400 | 2.88 | 1.50 |
| 8600 | 2.11 | 1.15 |
| 9000 | 1.57 | 1.06 |
| 9500 | 1.43 | 1.24 |
| 10000 | 1.47 | 1.46 |
| 12000 | 0.92 | 1.22 |
| 13000 | 1.10 | 1.48 |
| 16000 | 5.43 | 4.72 |

VHF-8400
INSERTION LOSS



VHF-8400
VSWR



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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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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page 1 of 1