

Coaxial High Pass Filter

VHF-1810+

50Ω 1900 to 4750 MHz



Generic photo used for illustration purposes only

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

- rugged unibody construction, small size
- 7 sections
- temperature stable
- excellent power handling, 7W
- low cost

Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use

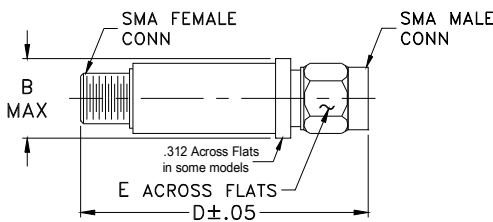
CASE STYLE: FF704

| | |
|------------|-----------|
| Connectors | Model |
| SMA | VHF-1810+ |

+RoHS Compliant

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

Outline Drawing



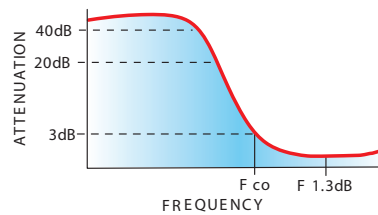
Outline Dimensions (inch/mm)

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

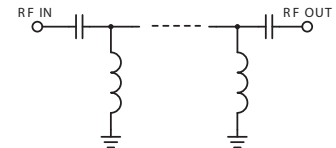
Electrical Specifications (T_{AMB}=25°C)

| STOP BAND (MHz) | | f _{co} , MHz | PASSBAND (MHz) | | VSWR (:1) | NO. OF SECTIONS |
|-----------------|----------------|-----------------------|----------------------|--------------------|-----------------------|-----------------|
| Min. | Typ. | Nom. | Max. | Typ. | Typ. | |
| (loss > 40 dB) | (loss > 20 dB) | (loss 3 dB) Typ. | (loss < 1.3 dB) Max. | (loss < 2 dB) Typ. | Stopband | 7 |
| 1100 | 1480 | 1810 | 2250-4000 | 1900-4750 | Frequency (MHz) 1.5:1 | |

typical frequency response

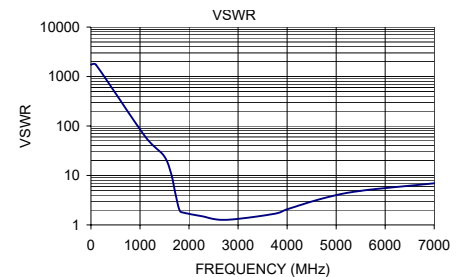


electrical schematic



Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1 | 94.72 | 1737.18 |
| 100 | 76.19 | 1737.18 |
| 1100 | 58.71 | 62.05 |
| 1480 | 27.69 | 25.56 |
| 1630 | 13.76 | 11.24 |
| 1730 | 6.11 | 3.98 |
| 1810 | 2.86 | 1.95 |
| 1900 | 1.84 | 1.76 |
| 2250 | 0.90 | 1.51 |
| 2750 | 0.55 | 1.27 |
| 3750 | 0.74 | 1.68 |
| 4000 | 1.03 | 2.07 |
| 4750 | 2.13 | 3.48 |
| 5500 | 3.10 | 4.88 |
| 7000 | 4.35 | 6.94 |



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-Circuits' applicable established test performance criteria and measurement instructions.
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