

# High Pass Filter

50Ω, 4250 to 10000 MHz

## Maximum Ratings

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

\*derate linearly to 3W at 100°C ambient

## 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



CASE STYLE: FF704

| Connectors | Model       | Price       | Qty.  |
|------------|-------------|-------------|-------|
| SMA        | VHF-3800-S  | \$24.95 ea. | (1-9) |
| SMA        | VHF-3800-S+ | \$24.95 ea. | (1-9) |

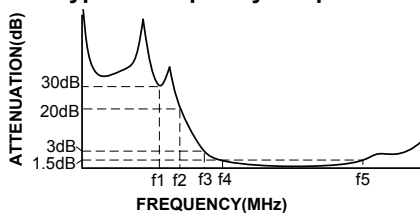
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

See our web site for RoHS Compliance methodologies and qualifications.

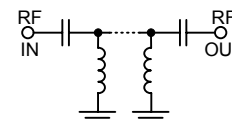
## High Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

| MODEL NO.   | STOPBAND (MHz)         |                        | f <sub>co</sub> , MHz<br>Nom.<br>(Loss 3dB)<br>Typ. f <sub>3</sub> | PASSBAND (MHz)                      |             | VSWR<br>Typ.<br>Stopband Frequency (MHz)<br>1.5:1 | POWER INPUT (W)<br>Max. |
|-------------|------------------------|------------------------|--------------------------------------------------------------------|-------------------------------------|-------------|---------------------------------------------------|-------------------------|
|             | (Loss 30dB)            | (Loss >20dB)           |                                                                    | (Loss <1.5dB)                       | (Loss <2dB) |                                                   |                         |
|             | Typ. DC-f <sub>1</sub> | Min. DC-f <sub>2</sub> |                                                                    | Max. f <sub>4</sub> -f <sub>5</sub> | Max.        |                                                   |                         |
| VHF-3800(+) | DC-3100                | DC-3200                | 3800                                                               | 4500-9000                           | 4250-10000  | 20:1 3950-10000                                   | 7                       |

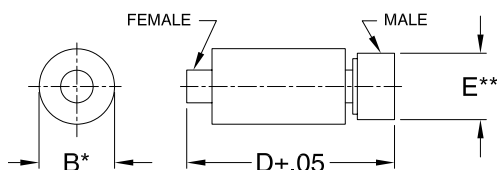
## Typical Frequency Response



## Schematic



## Outline Drawing



B-OVERALL BODY DIMENSION

\* MAX

\*\* ACROSS FLATS

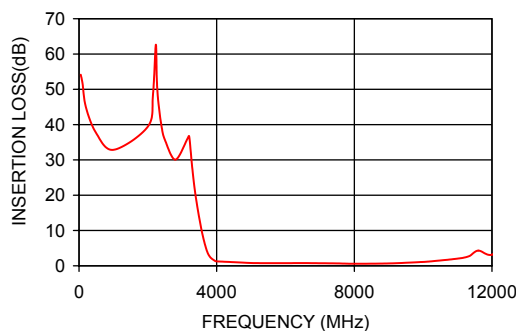
## Outline Dimensions (Inch/mm)

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

## Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 50              | 54.14               | 1737.18   |
| 500             | 37.58               | 1737.18   |
| 1500            | 32.52               | 108.58    |
| 3100            | 33.38               | 31.60     |
| 3200            | 36.68               | 28.03     |
| 3400            | 19.19               | 18.90     |
| 3550            | 10.63               | 9.33      |
| 3800            | 2.59                | 2.00      |
| 3950            | 1.41                | 1.16      |
| 4250            | 1.14                | 1.45      |
| 4500            | 1.02                | 1.43      |
| 7000            | 0.72                | 1.22      |
| 9000            | 0.68                | 1.28      |
| 10000           | 1.13                | 1.70      |
| 11330           | 2.71                | 1.96      |
| 12000           | 3.15                | 1.70      |

VHF-3800  
INSERTION LOSS



VHF-3800  
VSWR

