

# Coaxial High Pass Filter

## SHP-400+

50Ω 395 to 3200 MHz

### Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input        | 0.5W max.      |

### Features

- rugged shielded case
- other standard and custom SHP models available with wide selection of fco

### Applications

- lab use
- transmitters/receivers
- radio communications



CASE STYLE: FF99

| Connectors | Model    | Price       | Qty.  |
|------------|----------|-------------|-------|
| SMA        | SHP-400+ | \$38.95 ea. | (1-9) |

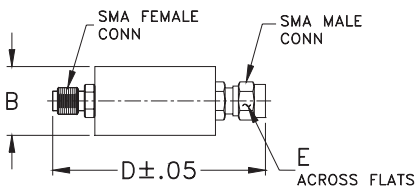
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### High Pass Filter Electrical Specifications

| STOPBAND (MHz) |                | fco (MHz) Nom. | PASSBAND (MHz) | VSWR (:1)     |               |
|----------------|----------------|----------------|----------------|---------------|---------------|
| (loss > 40 dB) | (loss > 20 dB) | (loss 3 dB)    | (loss < 1 dB)  | Stopband Typ. | Passband Typ. |
| DC-210         | 210-290        | 360            | 395-3200       | 17            | 1.7           |

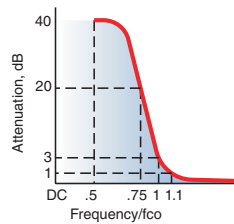
### Outline Drawing



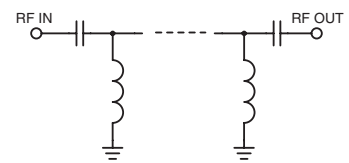
### Outline Dimensions (inch/mm)

| B     | D     | E    | wt    |
|-------|-------|------|-------|
| .67   | 1.98  | .312 | grams |
| 17.02 | 50.29 | 7.92 | 42.0  |

### typical frequency response

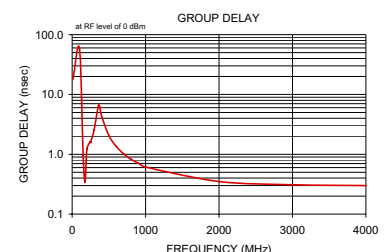
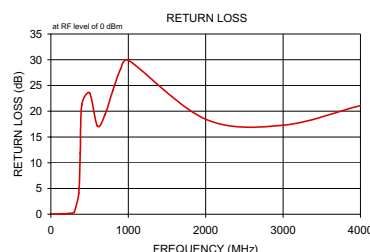
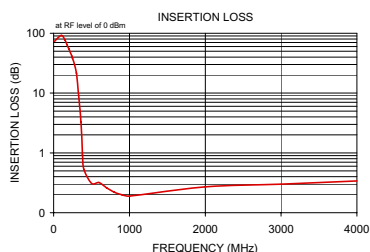


### electrical schematic



### Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|------------------|-----------------|--------------------|
|                 | $\bar{x}$           | $\sigma$         |                 |                    |
| 10.00           | 73.49               | 3.76             | 10.00           | 17.71              |
| 100.00          | 92.04               | 7.79             | 100.00          | 57.88              |
| 150.00          | 76.80               | 1.38             | 150.00          | 0.94               |
| 175.00          | 64.86               | 0.57             | 175.00          | 0.34               |
| 200.00          | 55.25               | 0.43             | 200.00          | 1.22               |
| 240.00          | 41.38               | 0.57             | 240.00          | 1.56               |
| 241.00          | 41.06               | 0.57             | 241.00          | 1.56               |
| 242.00          | 40.72               | 0.57             | 242.00          | 1.57               |
| 243.00          | 40.39               | 0.58             | 243.00          | 1.57               |
| 244.00          | 40.06               | 0.58             | 244.00          | 1.58               |
| 245.00          | 39.73               | 0.58             | 245.00          | 1.61               |
| 246.00          | 39.40               | 0.57             | 246.00          | 1.60               |
| 247.00          | 39.07               | 0.59             | 247.00          | 1.60               |
| 250.00          | 38.09               | 0.59             | 250.00          | 1.61               |
| 275.00          | 29.94               | 0.66             | 275.00          | 1.96               |
| 300.00          | 21.83               | 0.75             | 300.00          | 2.53               |
| 301.00          | 21.50               | 0.75             | 301.00          | 2.56               |
| 302.00          | 21.18               | 0.76             | 302.00          | 2.59               |
| 360.00          | 3.31                | 0.67             | 360.00          | 6.64               |
| 380.00          | 0.95                | 0.19             | 380.00          | 6.00               |
| 400.00          | 0.53                | 0.01             | 400.00          | 4.41               |
| 500.00          | 0.31                | 0.02             | 500.00          | 2.06               |
| 600.00          | 0.32                | 0.03             | 600.00          | 1.35               |
| 700.00          | 0.26                | 0.02             | 700.00          | 1.02               |
| 800.00          | 0.22                | 0.01             | 800.00          | 0.83               |
| 900.00          | 0.20                | 0.01             | 900.00          | 0.71               |
| 1000.00         | 0.19                | 0.01             | 1000.00         | 0.61               |
| 2000.00         | 0.27                | 0.02             | 2000.00         | 0.35               |
| 3000.00         | 0.30                | 0.03             | 3000.00         | 0.31               |
| 4000.00         | 0.34                | 0.01             | 4000.00         | 0.30               |



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