

# Plug-In High Pass Filter

## PHP-200+

50Ω 185 to 800 MHz

### Maximum Ratings

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

Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

|             |             |
|-------------|-------------|
| INPUT       | 1           |
| OUTPUT      | 8           |
| GROUND      | 2,3,4,5,6,7 |
| CASE GROUND | 2,3,4,5,6,7 |

### Features

- rugged shielded case, hermetically sealed
- other standard and custom PHP models available with wide selection of fco

### Applications

- lab use
- transmitters/receivers
- military/hi-rel application



Generic photo used for illustration purposes only

CASE STYLE: A01

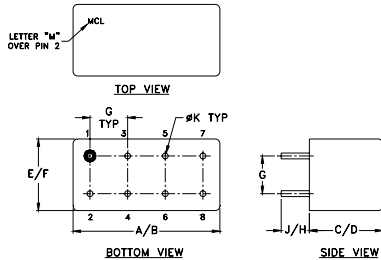
**+RoHS Compliant**

The +Suffix identifies 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)  | Stopband Typ. Passband Typ. |
| DC-90          | 90-116         | 164            | 17 1.6                      |

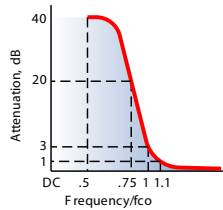
### Outline Drawing



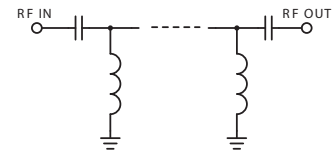
### Outline Dimensions (inch/mm)

| A     | B     | C    | D     | E     | F     |
|-------|-------|------|-------|-------|-------|
| .770  | .800  | .385 | .400  | .370  | .400  |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40  | 10.16 |
| G     | H     | J    | K     | wt    |       |
| .200  | .20   | .14  | .031  | grams |       |
| 5.08  | 5.08  | 3.56 | 0.79  | 5.2   |       |

### typical frequency response

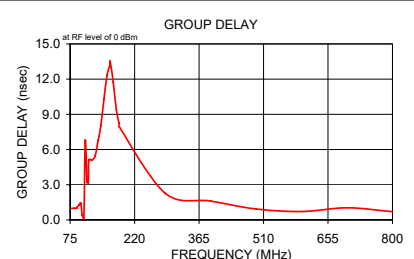
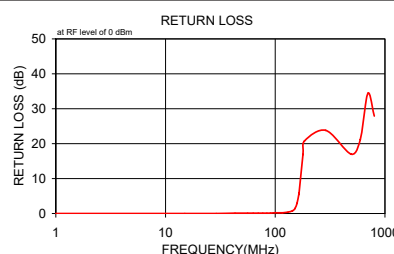


### electrical schematic



### Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) |          | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|---------------------|----------|------------------|-----------------|--------------------|
|                 | $\bar{x}$           | $\sigma$ |                  |                 |                    |
| 1.00            | 79.13               | 4.3      | 0.0              | 77.00           | 0.98               |
| 15.00           | 82.18               | 2.2      | 0.0              | 84.00           | 0.99               |
| 29.00           | 71.32               | 5.5      | 0.0              | 90.00           | 1.01               |
| 43.00           | 76.14               | 5.3      | 0.1              | 91.00           | 1.11               |
| 56.00           | 80.66               | 8.1      | 0.1              | 95.00           | 1.26               |
| 63.00           | 71.77               | 4.8      | 0.1              | 99.00           | 1.43               |
| 70.00           | 68.26               | 1.4      | 0.1              | 102.00          | 0.44               |
| 77.00           | 64.30               | 1.4      | 0.1              | 106.00          | 0.13               |
| 84.00           | 57.15               | 0.6      | 0.1              | 109.00          | 6.77               |
| 90.00           | 51.69               | 0.7      | 0.1              | 113.00          | 3.23               |
| 91.00           | 51.14               | 0.4      | 0.1              | 116.00          | 3.16               |
| 99.00           | 45.20               | 0.4      | 0.2              | 117.00          | 5.12               |
| 106.00          | 40.04               | 0.5      | 0.2              | 124.00          | 5.09               |
| 109.00          | 37.91               | 0.4      | 0.2              | 131.00          | 5.42               |
| 113.00          | 35.09               | 0.5      | 0.2              | 138.00          | 6.79               |
| 116.00          | 32.89               | 0.5      | 0.2              | 144.00          | 8.01               |
| 117.00          | 32.20               | 0.5      | 0.2              | 151.00          | 10.28              |
| 131.00          | 22.48               | 0.4      | 0.4              | 158.00          | 12.34              |
| 144.00          | 13.65               | 0.3      | 0.8              | 164.00          | 13.13              |
| 151.00          | 9.11                | 0.2      | 1.4              | 165.00          | 13.51              |
| 158.00          | 5.16                | 0.2      | 2.9              | 172.00          | 11.71              |
| 164.00          | 2.79                | 0.3      | 5.4              | 179.00          | 9.38               |
| 165.00          | 2.50                | 0.3      | 5.9              | 185.00          | 8.24               |
| 179.00          | 0.74                | 0.1      | 16.9             | 186.00          | 7.90               |
| 185.00          | 0.60                | 0.1      | 20.8             | 289.00          | 2.27               |
| 289.00          | 0.32                | 0.1      | 23.8             | 391.00          | 1.61               |
| 493.00          | 0.34                | 0.1      | 17.0             | 493.00          | 0.93               |
| 596.00          | 0.29                | 0.1      | 21.2             | 596.00          | 0.72               |
| 698.00          | 0.26                | 0.1      | 34.4             | 698.00          | 1.03               |
| 800.00          | 0.27                | 0.1      | 27.9             | 800.00          | 0.70               |



### Notes

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