

# Coaxial High Pass Filter

50Ω 185 to 3000 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.

## Features

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

## Applications

- lab use
- transmitters/receivers
- radio communications

NHP-200+  
NHP-200



CASE STYLE: FF57

| Connectors | Model      | Price       | Qty.  |
|------------|------------|-------------|-------|
| N-Type     | NHP-200(+) | \$39.95 ea. | (1-9) |

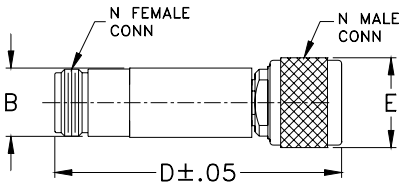
**+RoHS Compliant**

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)    | (loss < 1 dB)  | Stopband Typ. Passband Typ. |
| DC-90 90-116                  | 164            | 185-3000       | 17 1.6                      |

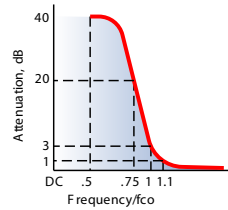
## Outline Drawing



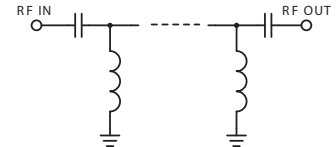
## Outline Dimensions (inch)

| B     | D     | E     | wt    |
|-------|-------|-------|-------|
| .67   | 2.90  | .82   | grams |
| 17.02 | 73.66 | 20.83 | 90.0  |

## typical frequency response

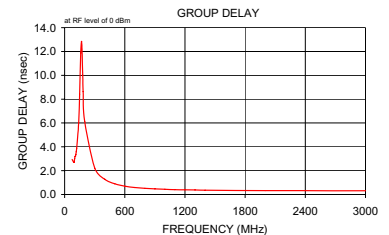
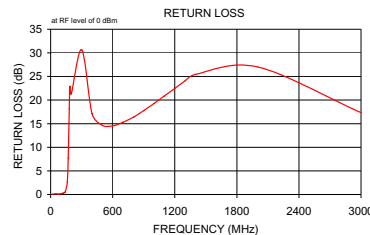


## electrical schematic



## Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) $\bar{x}$ $\sigma$ | Return Loss (dB) | Frequency (MHz) | Group Delay (nsec) |
|-----------------|----------------------------------------|------------------|-----------------|--------------------|
| 10.00           | 71.62 2.72                             | 0.06             | 75.00           | 2.93               |
| 50.00           | 87.09 4.73                             | 0.13             | 90.00           | 2.71               |
| 70.00           | 73.00 0.87                             | 0.10             | 95.00           | 2.71               |
| 75.00           | 68.35 1.20                             | 0.09             | 100.00          | 3.03               |
| 90.00           | 55.00 0.48                             | 0.11             | 104.00          | 3.20               |
| 95.00           | 50.91 0.53                             | 0.13             | 108.00          | 3.21               |
| 100.00          | 47.05 0.54                             | 0.14             | 112.00          | 3.36               |
| 108.00          | 41.12 0.52                             | 0.19             | 116.00          | 3.60               |
| 116.00          | 35.41 0.54                             | 0.25             | 120.00          | 3.87               |
| 120.00          | 32.62 0.56                             | 0.28             | 140.00          | 6.03               |
| 140.00          | 18.90 0.65                             | 0.52             | 150.00          | 8.41               |
| 160.00          | 5.88 0.58                              | 2.57             | 160.00          | 11.87              |
| 170.00          | 1.99 0.26                              | 7.68             | 170.00          | 12.82              |
| 180.00          | 0.82 0.06                              | 18.19            | 180.00          | 10.02              |
| 185.00          | 0.68 0.03                              | 22.90            | 185.00          | 8.64               |
| 200.00          | 0.55 0.03                              | 21.35            | 200.00          | 6.12               |
| 300.00          | 0.28 0.02                              | 30.67            | 300.00          | 2.20               |
| 400.00          | 0.31 0.01                              | 17.13            | 400.00          | 1.28               |
| 500.00          | 0.35 0.01                              | 14.65            | 500.00          | 0.90               |
| 600.00          | 0.34 0.01                              | 14.54            | 600.00          | 0.70               |
| 700.00          | 0.32 0.01                              | 15.30            | 700.00          | 0.59               |
| 800.00          | 0.29 0.01                              | 16.38            | 800.00          | 0.52               |
| 900.00          | 0.27 0.01                              | 17.76            | 900.00          | 0.47               |
| 1000.00         | 0.25 0.01                              | 19.27            | 1000.00         | 0.44               |
| 1100.00         | 0.25 0.01                              | 20.89            | 1100.00         | 0.41               |
| 1200.00         | 0.25 0.01                              | 22.44            | 1200.00         | 0.39               |
| 1300.00         | 0.26 0.01                              | 24.09            | 1300.00         | 0.38               |
| 1400.00         | 0.25 0.01                              | 25.43            | 1400.00         | 0.36               |
| 2000.00         | 0.31 0.01                              | 27.03            | 2000.00         | 0.33               |
| 3000.00         | 0.51 0.02                              | 17.33            | 3000.00         | 0.32               |



## Notes

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