

# Coaxial High Pass Filter

## ZFHP-0R50+

50Ω      0.50 to 750 MHz

### The Big Deal

- Low insertion loss
- High rejection
- Connectorized package



CASE STYLE: H16

### Product Overview

ZFHP-0R50+ is a High pass filter in a connectorized package. This low frequency cut-off high pass filter eliminates noise that feed into RF / base band circuits from low frequency sources.

### Key Features

| Feature                           | Advantages  |
|-----------------------------------|---|
| Low insertion loss                | Can be used in high performance applications.   |
| Excellent low frequency rejection | Filters out low frequency noise from sources such as electric motors and generators. SMDS noise filtering and IF noise filtering. |
| Connectorized package             | The connectorized package is easy to interface with other devices and well suited for test setups.                                |

#### Notes

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B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
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# Coaxial High Pass Filter

50Ω 0.50 to 750 MHz

ZFHP-0R50+



## Features

- Wide band, 0.50 MHz to 750 MHz
- High rejection
- Connectorized package

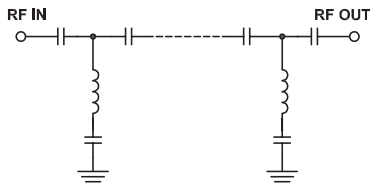
CASE STYLE: H16

Connectors Model  
SMA-FEMALE ZFHP-0R50-S+  
BRACKET (OPTION "B")

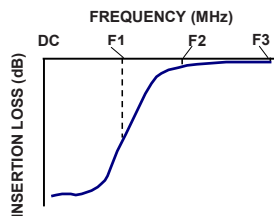
## Applications

- Wire-line broad band access
- Fiber optic networks
- Receivers \ transmitters
- Electrical equipment noise elimination

## Functional Schematic



## Typical Frequency Response



## Electrical Specifications at 25°C

| Parameter | F#             | Frequency (MHz) | Min.     | Typ. | Max. | Unit |
|-----------|----------------|-----------------|----------|------|------|------|
| Stop Band | Rejection Loss | DC-F1           | DC-0.25  | 25   | 59   | dB   |
|           | VSWR           | DC-F1           | DC-0.25  | -    | 40   | :1   |
| Pass Band | Insertion Loss | F2-F3           | 0.50-750 | -    | 0.7  | dB   |
|           | VSWR           | F2-F3           | 0.50-750 | -    | 1.3  | :1   |

## Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input        | +5 dBm max.    |

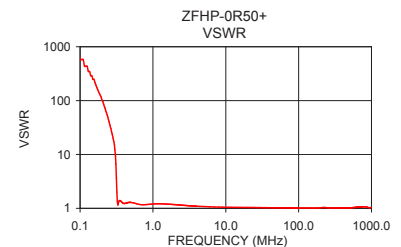
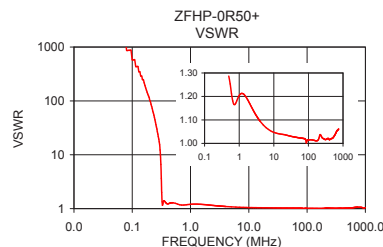
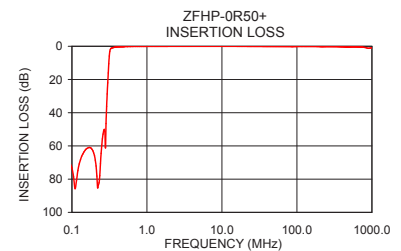
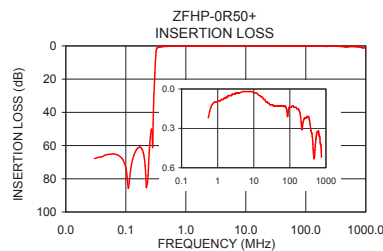
Permanent damage may occur if any of these limits are exceeded.

## Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 0.030           | 67.84               | 1737.18   |
| 0.250           | 59.57               | 40.41     |
| 0.290           | 36.17               | 17.39     |
| 0.300           | 22.02               | 12.26     |
| 0.305           | 16.08               | 9.79      |
| 0.315           | 5.87                | 3.65      |
| 0.320           | 3.10                | 2.01      |
| 0.400           | 0.41                | 1.23      |
| 0.450           | 0.30                | 1.27      |
| 0.500           | 0.25                | 1.29      |
| 1.000           | 0.09                | 1.20      |
| 10.000          | 0.03                | 1.05      |
| 50.000          | 0.13                | 1.02      |
| 100.000         | 0.14                | 1.02      |
| 250.000         | 0.23                | 1.02      |
| 350.000         | 0.24                | 1.02      |
| 500.000         | 0.46                | 1.02      |
| 600.000         | 0.33                | 1.04      |
| 700.000         | 0.42                | 1.06      |
| 750.000         | 0.52                | 1.06      |

## +RoHS Compliant

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



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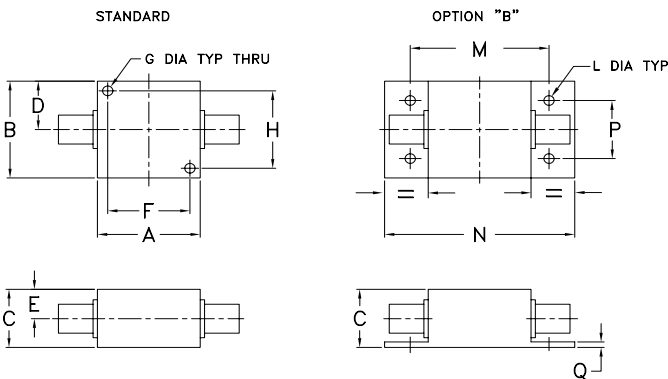
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Coaxial Connections

|        |            |
|--------|------------|
| INPUT  | SMA-Female |
| OUTPUT | SMA-Female |

Outline Drawing



Outline Dimensions (  $\frac{\text{inch}}{\text{mm}}$  )

|     |       |       |       |      |       |      |       |
|-----|-------|-------|-------|------|-------|------|-------|
| A   | B     | C     | D     | E    | F     | G    | H     |
| .25 | 1.25  | .75   | .63   | .38  | 1.000 | .125 | 1.000 |
| .75 | 31.75 | 19.05 | 16.00 | 9.65 | 25.40 | 3.18 | 25.40 |

|    |    |      |       |       |       |      |       |
|----|----|------|-------|-------|-------|------|-------|
| J  | K  | L    | M     | N     | P     | Q    | wt    |
| -- | -- | .125 | 1.688 | 2.18  | .750  | .06  | grams |
| -- | -- | 3.18 | 42.88 | 55.37 | 19.05 | 1.52 | 70.0  |

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