

Coaxial High Pass Filter

ZX75HP-250+

50Ω 400 to 3000 MHz

The Big Deal

- Low insertion loss
- High rejection
- Connectorized package



CASE STYLE: KE1467

Product Overview

ZX75HP-250+ is a High pass filter in a rugged connectorized package covering 400 to 3000 MHz. This filter will find its application in TV Broadcast, point-to-point military radio and cordless telephones. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

| Feature | Advantages |
|-----------------------|--|
| Low insertion loss | Can be used in high performance applications. |
| Good rejection | This enables the filter to attenuate spurious signals and reject harmonics for broad band frequency. |
| Connectorized package | The connectorized package is easy to interface with other devices and well suited for test setups. |

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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| | |
|------------|---------------|
| Connectors | Model |
| SMA-M/F | ZX75HP-250-S+ |

Features

- Wide band, 400 MHz to 3000 MHz
- High rejection
- Connectorized package

Applications

- TV Broadcast
- Point-to-point military radio
- Cordless telephones

Electrical Specifications at 25°C

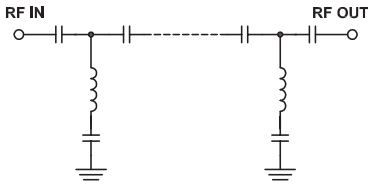
| Parameter | F# | Frequency (MHz) | Min. | Typ. | Max. | Unit | |
|-----------|----------------|-----------------|----------|------|------|------|----|
| Stop Band | Rejection Loss | DC-F1 | DC-178 | 20 | 30 | - | dB |
| | VSWR | DC-F1 | DC-178 | - | 67 | - | :1 |
| Pass Band | Insertion Loss | F2-F3 | 400-3000 | - | 0.6 | 1.5 | dB |
| | VSWR | F2-F3 | 400-3000 | - | 1.5 | - | :1 |

Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input | 0.5 W. |

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

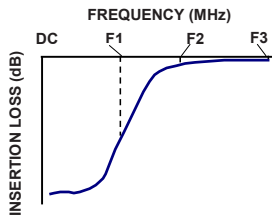
Functional Schematic



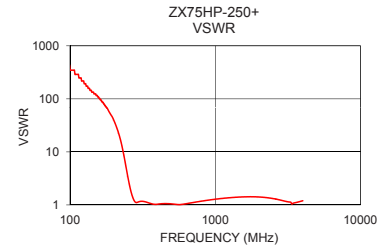
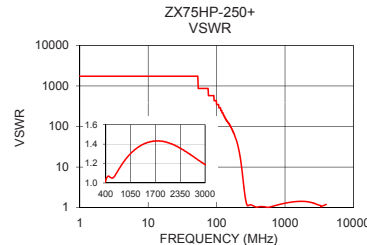
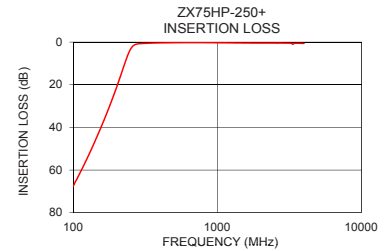
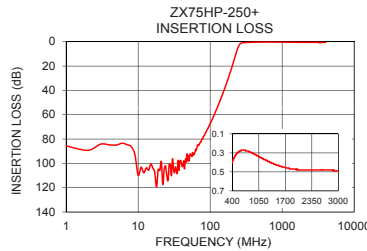
Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1 | 85.68 | 1737.18 |
| 73 | 82.95 | 868.59 |
| 114 | 59.95 | 289.53 |
| 143 | 45.77 | 133.63 |
| 178 | 30.31 | 69.49 |
| 215 | 15.04 | 23.18 |
| 235 | 7.45 | 8.35 |
| 250 | 3.30 | 3.33 |
| 260 | 1.81 | 1.99 |
| 275 | 0.96 | 1.23 |
| 340 | 0.52 | 1.12 |
| 400 | 0.39 | 1.03 |
| 605 | 0.28 | 1.04 |
| 915 | 0.31 | 1.24 |
| 1110 | 0.35 | 1.32 |
| 1260 | 0.38 | 1.37 |
| 1525 | 0.43 | 1.42 |
| 1855 | 0.47 | 1.42 |
| 2280 | 0.48 | 1.37 |
| 3000 | 0.49 | 1.18 |

Typical Frequency Response



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



Notes

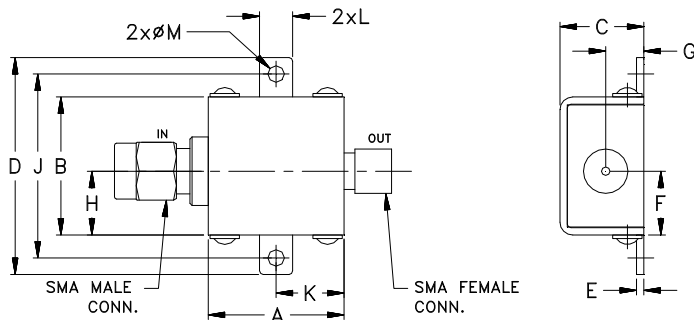
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Coaxial Connections

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

Outline Drawing



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

| A | B | C | D | E | F | G |
|-------|-------|-------|-------|------|-------|------|
| 0.74 | .75 | .46 | 1.18 | .04 | .349 | .21 |
| 18.80 | 19.05 | 11.68 | 29.97 | 1.02 | 8.86 | 5.33 |
| H | J | K | L | M | wt | |
| .349 | 1.00 | .37 | .18 | .09 | grams | |
| 8.86 | 25.40 | 9.40 | 4.57 | 2.29 | 24.4 | |

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