

Coaxial
High Pass Filter

ZX75HP-147+

50Ω 250 to 3000 MHz



CASE STYLE: KE1467

The Big Deal

- Low insertion loss
- High rejection
- Connectorized package

Product Overview

ZX75HP-147+ is a High pass filter in a rugged connectorized package covering 250 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-Circuits' 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



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

High Pass Filter

ZX75HP-147+

50Ω

250 to 3000 MHz



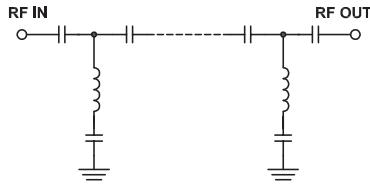
Features

- Wide band, 250 MHz to 3000 MHz
- High rejection
- Connectorized package

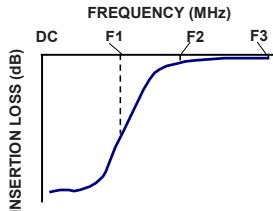
Applications

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

Functional Schematic



Typical Frequency Response



+RoHS Compliant

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

| CASE STYLE: KE1467 | |
|--------------------|---------------|
| Connectors | Model |
| SMA-M/F | ZX75HP-147-S+ |

Electrical Specifications at 25°C

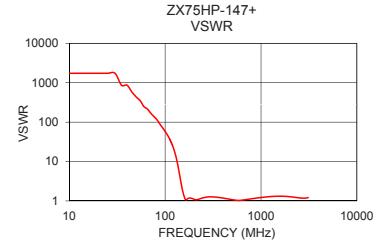
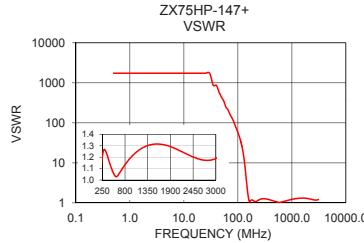
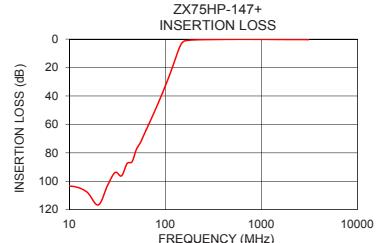
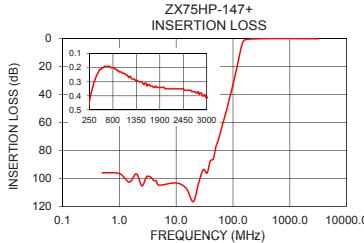
| Parameter | F# | Frequency (MHz) | Min. | Typ. | Max. | Unit |
|-----------|----------------|-----------------|----------|------|------|------|
| Stop Band | Rejection Loss | DC-F1 | DC-100 | 20 | 32 | - |
| | VSWR | DC-F1 | DC-100 | - | 53 | - |
| Pass Band | Insertion Loss | F2-F3 | 250-3000 | - | 0.6 | 1.5 |
| | VSWR | F2-F3 | 250-3000 | - | 1.4 | - |

| 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.

Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 0.5 | 96.08 | 1737.18 |
| 50.0 | 77.58 | 434.30 |
| 75.0 | 52.95 | 144.77 |
| 85.0 | 44.52 | 102.19 |
| 100.0 | 33.05 | 57.91 |
| 117.0 | 20.97 | 28.49 |
| 133.0 | 10.26 | 10.07 |
| 141.0 | 5.74 | 4.82 |
| 147.0 | 3.34 | 2.73 |
| 156.0 | 1.58 | 1.42 |
| 188.0 | 0.72 | 1.16 |
| 206.0 | 0.58 | 1.07 |
| 250.0 | 0.44 | 1.20 |
| 375.0 | 0.29 | 1.21 |
| 725.0 | 0.19 | 1.09 |
| 1150.0 | 0.26 | 1.26 |
| 1700.0 | 0.33 | 1.31 |
| 2300.0 | 0.35 | 1.23 |
| 2825.0 | 0.39 | 1.17 |
| 3000.0 | 0.41 | 1.19 |



Notes

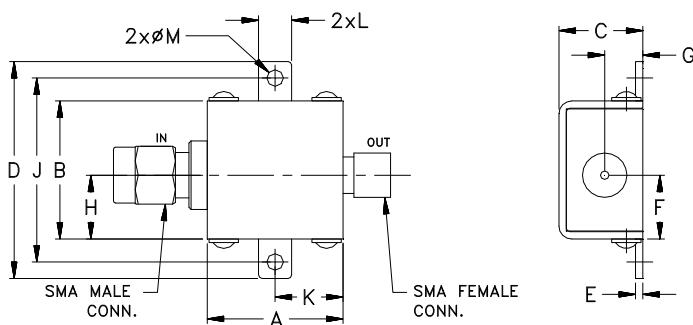
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's 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

 **Mini-Circuits®**

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

Coaxial Connections

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

Outline Drawing**Outline Dimensions (inch)**

| 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 |

- 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-Circuits' 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

