# Coaxial **High Pass Filter**

**50**Ω 185 to 2500 MHz

## **The Big Deal**

- Low insertion loss
- High rejection
- Connectorized package

# ZX75HP-110-S+



Generic photo used for illustration purposes only CASE STYLE: KE1467

## **Product Overview**

ZX75HP-110-S+ is a High pass filter in a rugged connectorized package covering 185 to 2500 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 (collectived), "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



# Coaxial **High Pass Filter**

**50**Ω 185 to 2500 MHz

### **Features**

- Wide band, 185 MHz to 2500 MHz
- High rejection

**Applications** • TV Broadcast

Connectorized package





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SMA-M\F

CASE STYLE: KE1467 Model Connectors

ZX75HP-110-S+

### Electrical Specifications at 25°C

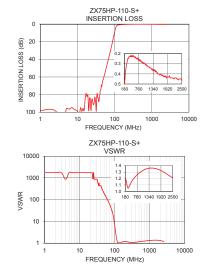
|   | Parameter |                | F#    | Frequency (MHz) | Min. | Тур. | Max. | Unit |
|---|-----------|----------------|-------|-----------------|------|------|------|------|
| Γ | Stop Band | Rejection Loss | DC-F1 | DC-77           | 20   | 30   | -    | dB   |
|   |           | VSWR           | DC-F1 | DC-77           | -    | 20   | -    | :1   |
| Γ | Pass Band | Insertion Loss | F2-F3 | 185-2500        | -    | 0.5  | 1.2  | dB   |
|   | Pass band | VSWR           | F2-F3 | 185-2500        | -    | 1.4  | -    | :1   |

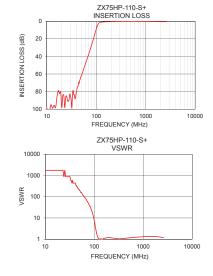
**Maximum Ratings** Operating Temperature -40°C to 85°C -55°C to 100°C Storage Temperature 0.5 W. **RF** Power Input

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

### Typical Performance Data at 25°C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR<br>(:1) |  |
|--------------------|------------------------|--------------|--|
| 1                  | 98.14                  | 1737.18      |  |
| 4                  | 119.12                 | 868.59       |  |
| 16                 | 86.02                  | 1737.18      |  |
| 34                 | 78.51                  | 579.06       |  |
| 48                 | 63.93                  | 217.15       |  |
| 59                 | 50.19                  | 115.81       |  |
| 72                 | 35.51                  | 59.91        |  |
| 77                 | 30.37                  | 45.72        |  |
| 90                 | 17.73                  | 20.22        |  |
| 99                 | 9.60                   | 8.47         |  |
| 105                | 5.27                   | 4.07         |  |
| 110                | 2.95                   | 2.29         |  |
| 118                | 1.45                   | 1.26         |  |
| 141                | 0.76                   | 1.03         |  |
| 160                | 0.59                   | 1.10         |  |
| 185                | 0.48                   | 1.19         |  |
| 350                | 0.24                   | 1.06         |  |
| 1180               | 0.33                   | 1.35         |  |
| 1875               | 0.44                   | 1.33         |  |
| 2500               | 0.47                   | 1.21         |  |





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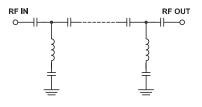
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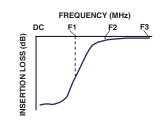
REV.C ECO-004400 ZX75HP-110-S+ EDU1689 URJ 201008 Page 2 of 3

· Point-to-point military radio Cordless telephones

### **Functional Schematic**



## **Typical Frequency Response**





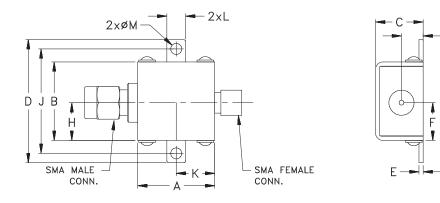
## **High Pass Filter**

## ZX75HP-110-S+

### **Coaxial Connections**

INPUT SMA-Male OUTPUT SMA-Female

### **Outline Drawing**



### Outline Dimensions ( inch )

| A           | B           | C          | D           | E          | F           | G          |
|-------------|-------------|------------|-------------|------------|-------------|------------|
| <b>.74</b>  | <b>.75</b>  | <b>.46</b> | <b>1.18</b> | <b>.04</b> | <b>.362</b> | <b>.21</b> |
| 18.80       | 19.05       | 11.68      | 29.97       | 1.02       | 9.19        | 5.33       |
| H           | J           | K          | L           | M          |             | Wt.        |
| <b>.362</b> | <b>1.00</b> | <b>.37</b> | <b>.18</b>  | <b>.11</b> |             | grams      |
| 9.19        | 25.40       | 9.40       | 4.57        | 2.79       |             | 24.4       |

Note: Please refer to case style drawing for details

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