# Coaxial **High Pass Filter**

**50**Ω 250 to 3000 MHz

## **The Big Deal**

- Low insertion loss
- High rejection
- Connectorized package

# ZX75HP-147-S+



Generic photo used for illustration purposes only CASE STYLE: KE1467

## **Product Overview**

ZX75HP-147-S+ 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-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 250 to 3000 MHz

### **Features**

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

**Applications** • TV Broadcast

Connectorized package

## ZX75HP-147-S+



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Connectors Model

ZX75HP-147-S+ SMA-M\F

### Electrical Specifications at 25°C

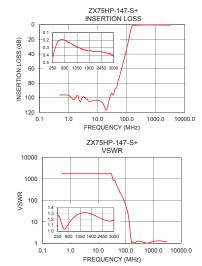
	Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Stop Band	Rejection Loss	DC-F1	DC-100	20	32	-	dB
		VSWR	DC-F1	DC-100	-	53	-	:1
	Pass Band	Insertion Loss	F2-F3	250-3000	-	0.6	1.5	dB
		VSWR	F2-F3	250-3000	-	1.4	-	:1

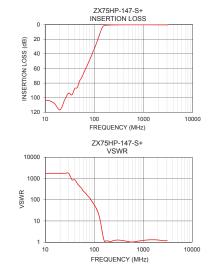
**Maximum Ratings** Operating Temperature -40°C to 85°C -55°C to 100°C Storage Temperature 0.5 W. **RF** Power Input

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

## Typical Performance Data at 25°C

Frequency (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





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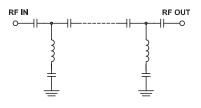
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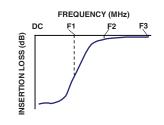
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### · Point-to-point military radio Cordless telephones

## **Functional Schematic**



## **Typical Frequency Response**





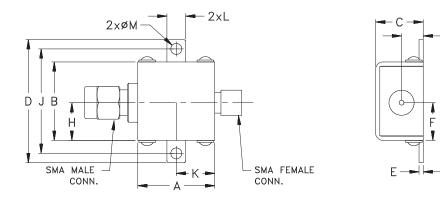
## **High Pass Filter**

ZX75HP-147-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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