

# Waveguide Bandpass Filter, W Band, 93.5 to 94.5 GHz

### **Description:**

Model SWF-94301330-10-B1 is a W band waveguide bandpass filter with a passband frequency of 93.5 to 94.5 GHz and rejection frequencies from DC to 92 GHz and 96 to 110 GHz. The nominal insertion loss of the bandpass filter is 2.5 dB and the typical rejection is 30 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available under different model numbers.



#### **Features:**

- Low Cost
- Low Insertion Loss
- High Rejection

## **Applications:**

- Communication Systems
- Radar Systems
- Sub-assemblies

## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	93.5 GHz		94.5 GHz
Passband Insertion Loss		2.5 dB	
Passband Ripple		±0.5 dB	
Rejection Frequency, Low Side	DC		92 GHz
Rejection Frequency, High Side	96 GHz		110 GHz
Rejection		30 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

# **Mechanical Specifications:**

Item	Specification	
Waveguide	WR-10 Waveguide with UG-387/U-M Flange	
Material	Aluminum	
Finish	Gold Plated	
Weight	0.4 Oz	
Size	1.20" (L) X 0.75" (Ø)	
Outline	WF-BW	

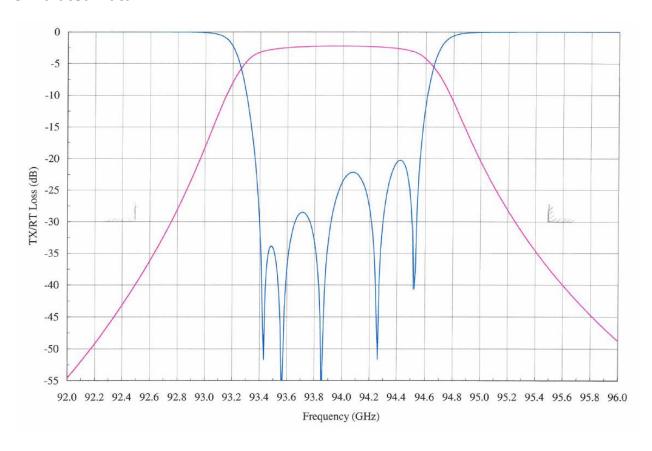


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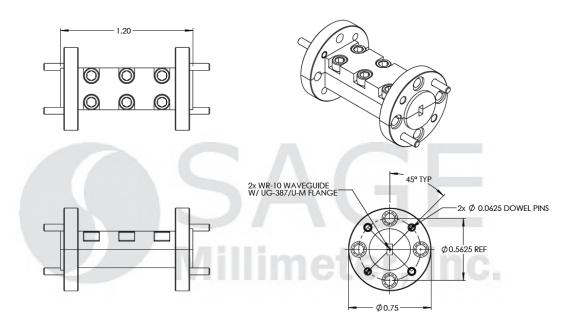


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### **Simulated Data**



### **Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches)





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#### Note:

- All data presented is simulated. Actual data may vary, slightly.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

 Any foreign objects in the waveguide will cause performance degradation and possible device damage.





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