



## Waveguide Bandpass Filter, W Band, 75 to 85 GHz

### Description:

**Model SWF-80310340-10-B1** is a W band waveguide bandpass filter with a passband frequency of 75 to 85 GHz as well as rejection frequencies from 60 to 70 GHz and 90 to 100 GHz. The nominal insertion loss of the bandpass filter is 3.0 dB and the typical rejection is 40 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	75 GHz		85 GHz
Passband Insertion Loss		3.0 dB	
Passband Ripple		±0.4 dB	
Rejection Frequency, Low Side	60 GHz		70 GHz
Rejection Frequency, High Side	90 GHz		100 GHz
Rejection	35 dB	40 dB	
Passband Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

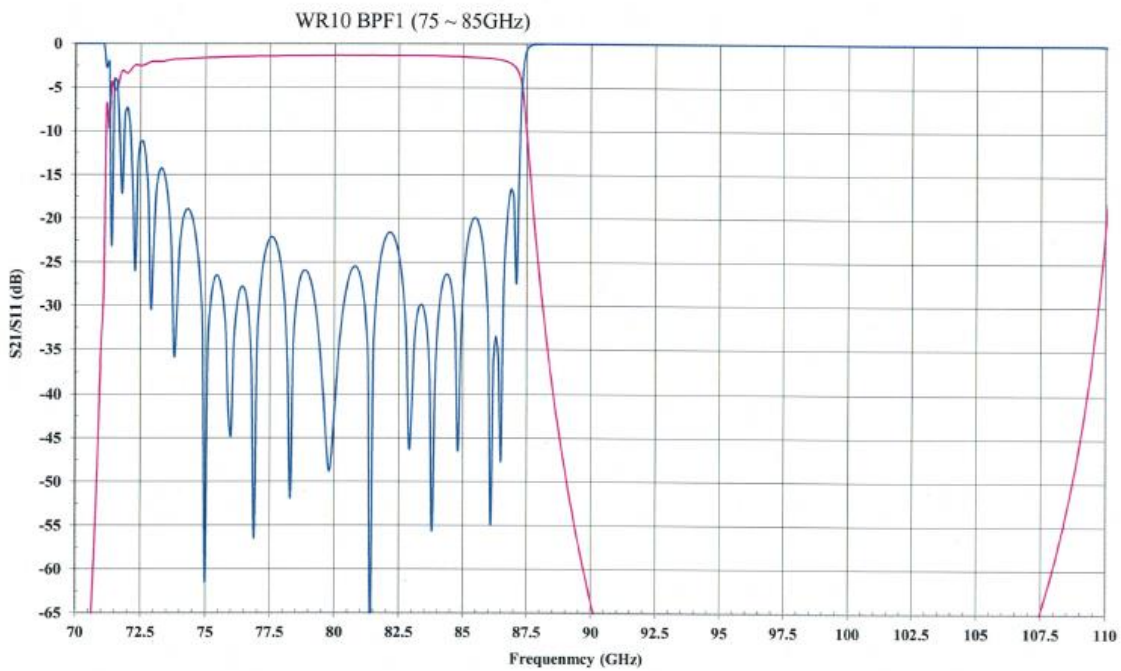
Item	Specification
Waveguide	WR-10 Waveguide with UG-387/U-M Flange
Size	2.2" (L) X 0.75" (W) X 0.75" (H)
Material	Brass
Finish	Gold Plated
Weight	1.4 Oz
Outline	WF-BW-2.2



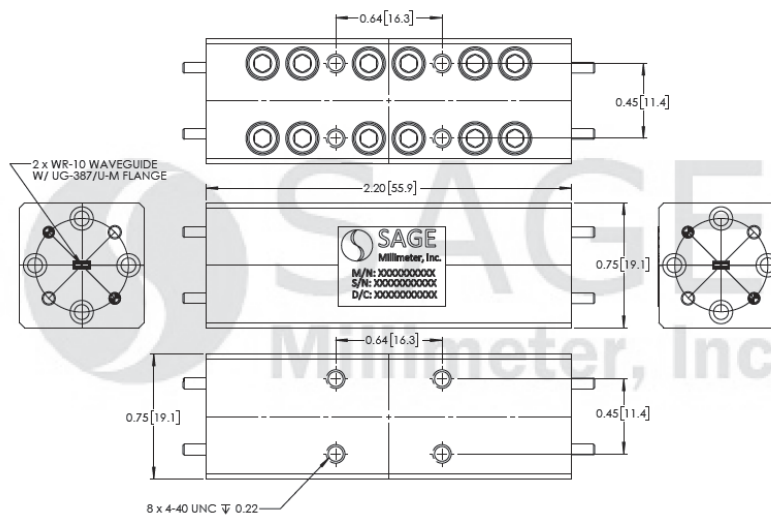


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### Simulated Data



**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



**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 degrade performance and/or damage the device.



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