

Waveguide Bandpass Filter, E Band, 76.5 GHz, ±500 MHz

Description:

Model SWF-77301350-12-B1-1 is an E band waveguide bandpass filter with a passband frequency of 76 to 77 GHz and rejection frequencies from DC to 74.5 GHz and 78.5 to 90 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the typical rejection is 50 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:

- E Band Communication Systems
- Automotive Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	76 GHz		77 GHz
Passband Insertion Loss		2.0 dB	
Passband Ripple		±0.3 dB	
Rejection Frequency, Low Side	DC		74.5 GHz
Rejection Frequency, High Side	78.5 GHz		90.0 GHz
Rejection		50 dB	
Passband VSWR		1.5:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

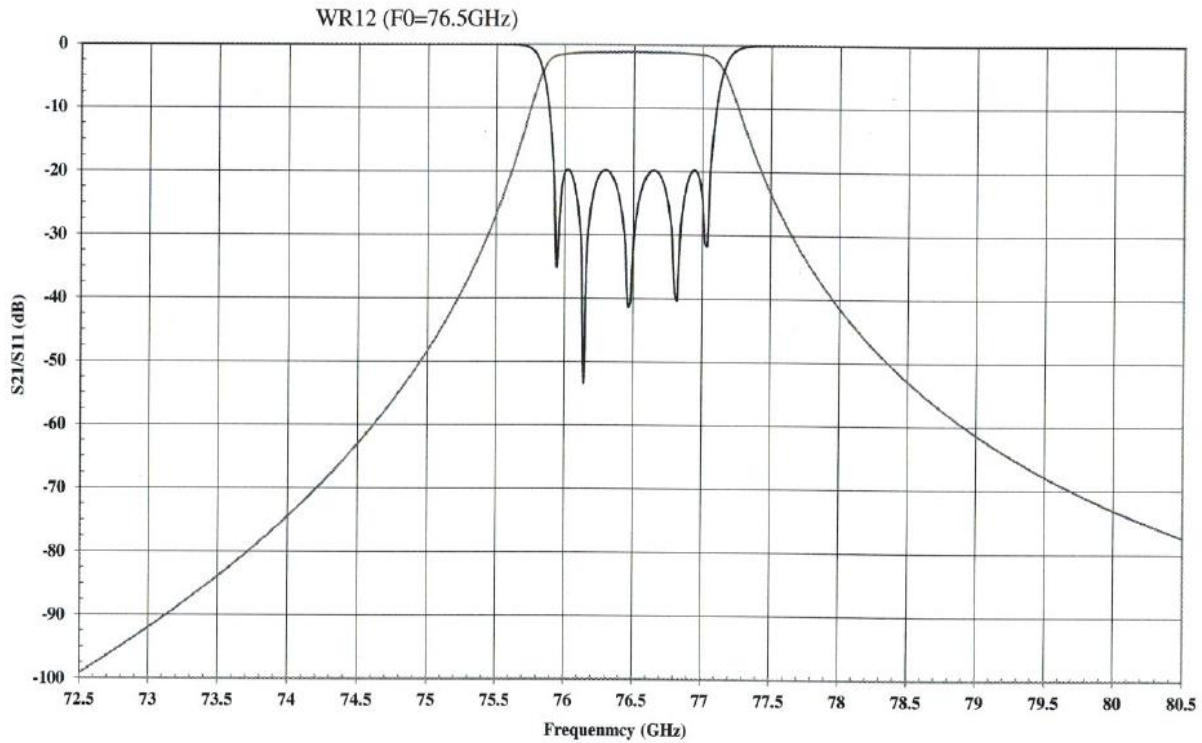
Mechanical Specifications:

Item	Specification
Waveguide	WR-12 Waveguide with UG-387/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Insertion Length	1.20" [30.48 mm]
Outline	WF-BE

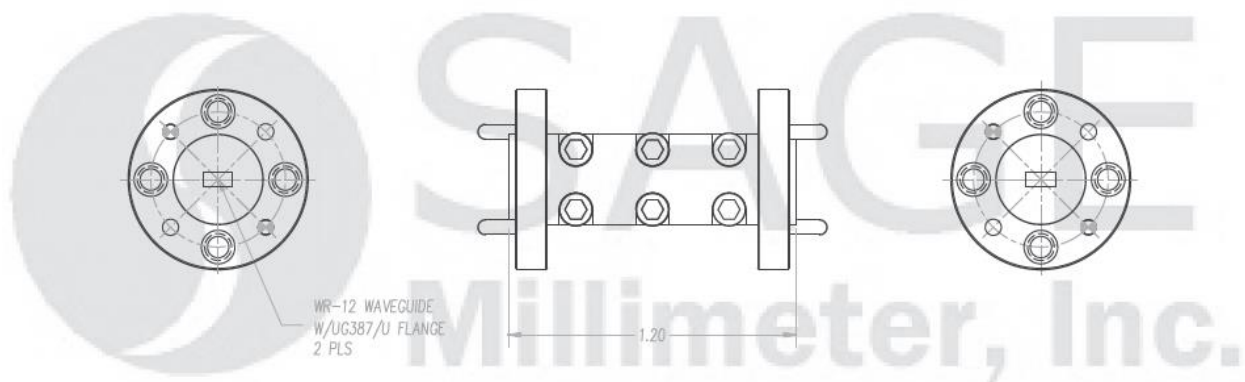


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Typical Performance vs. Frequency



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



Note:

- All data presented is simulated. Actual data may vary.
- 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.

