SWF-75370340-10-H1-WPC

Final Rev. 1.0

Waveguide Highpass Filter, W Band

Description:

Model SWF-75370340-10-H1-WPC is a W band waveguide highpass filter with a passband frequency of 75 GHz and higher and a rejection frequency from DC to 70 GHz. The filter provides a nominal insertion loss of 1.0 dB across its passband with a low ripple and a typical rejection of 40 dB. Since the low end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers. **This particular model features an optimized stepped impedance transformer design and E-plane cut for a smoother transition from the rejection band to the passband.**

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		
Passband Insertion Loss		1.0 dB	
Passband Ripple		±0.4 dB	
Passband Return Loss		15 dB	
Rejection Frequency	DC		70 GHz
Rejection		40 dB	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Waveguide	WR-10 with UG-387/U-M Anti-Cocking Flange
Size	1.20” (L) X 0.75” (Ø)
Material	Aluminum
Finish	Gold Plated
Weight	0.4 Oz
Outline	WF-HW-A-2

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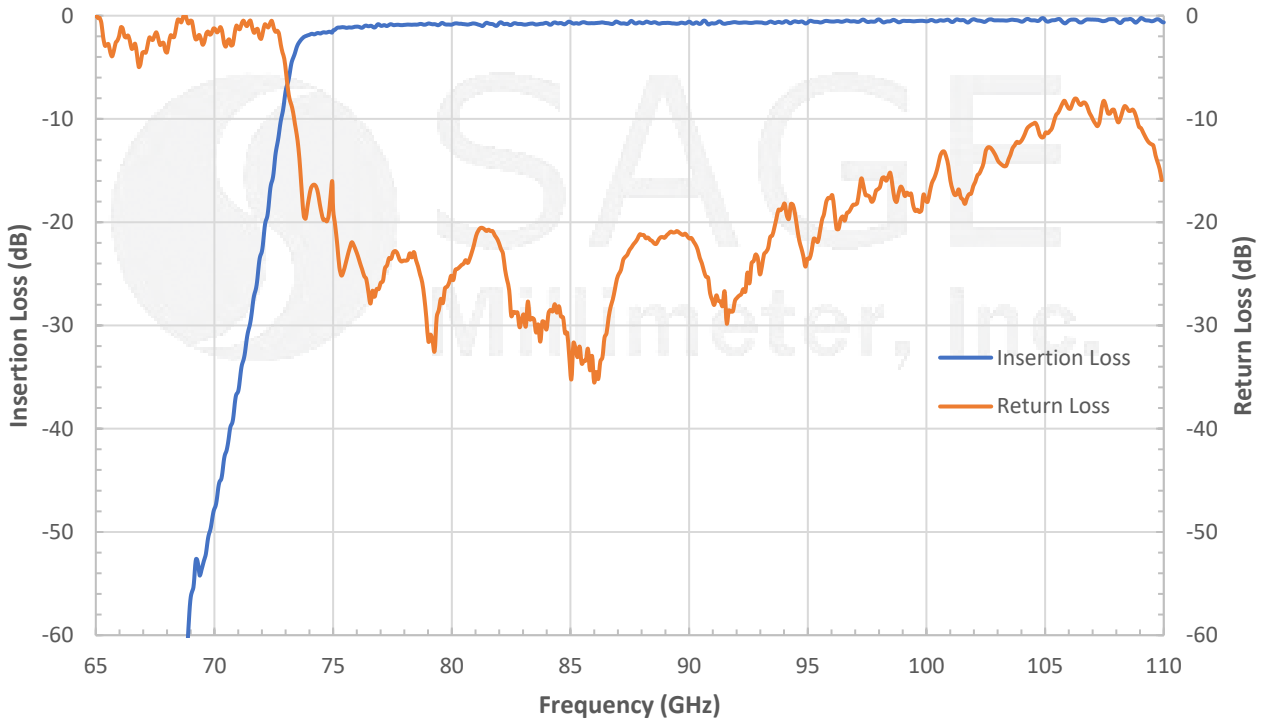
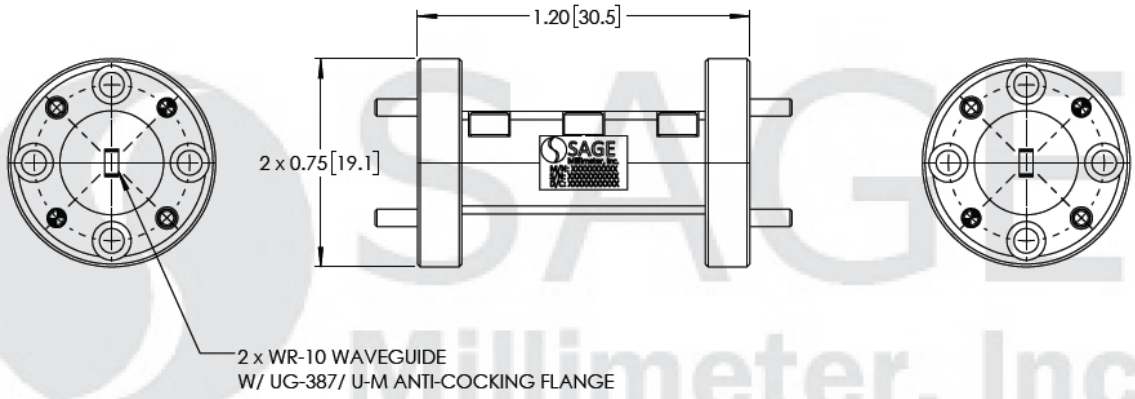
Typical Insertion and Return Loss vs Frequency



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



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 ˚C case temperature.
- 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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