SNW-7137630818-12-I1

Rev. 1.2

E Band Waveguide Junction Isolator, 71 to 76 GHz

Description:

Model SNW-7137630818-12-I1 is an E band waveguide junction isolator that covers the frequency range of 71 to 76 GHz. Compared with a Faraday isolator, the waveguide junction isolator offers at insertion loss of 0.8 dB typical and a much shorter insertion length for system integration. As a tradeoff, the waveguide junction isolator only offers a nominal isolation of 18 dB. The input and output ports are WR-12 waveguides with UG-387/U flanges.

Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- 5G Systems
- Last Mile Communication Systems
- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		76 GHz
Insertion Loss		0.8 dB	
Isolation		18 dB	
Return Loss		16 dB	
Forward Power Handling			3 W (CW)
Reverse Power Handling			1 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-12 Waveguide with UG-387/U Flange
Body Material	Aluminum
Body Finish	Silver Plated
Cover Finish	Black Anodized
Weight	0.7 Oz
Insertion Length	0.75”
Size	0.75” (L) X 0.85” (W) X 1.00” (H)
Outline	NW-IE-SX1

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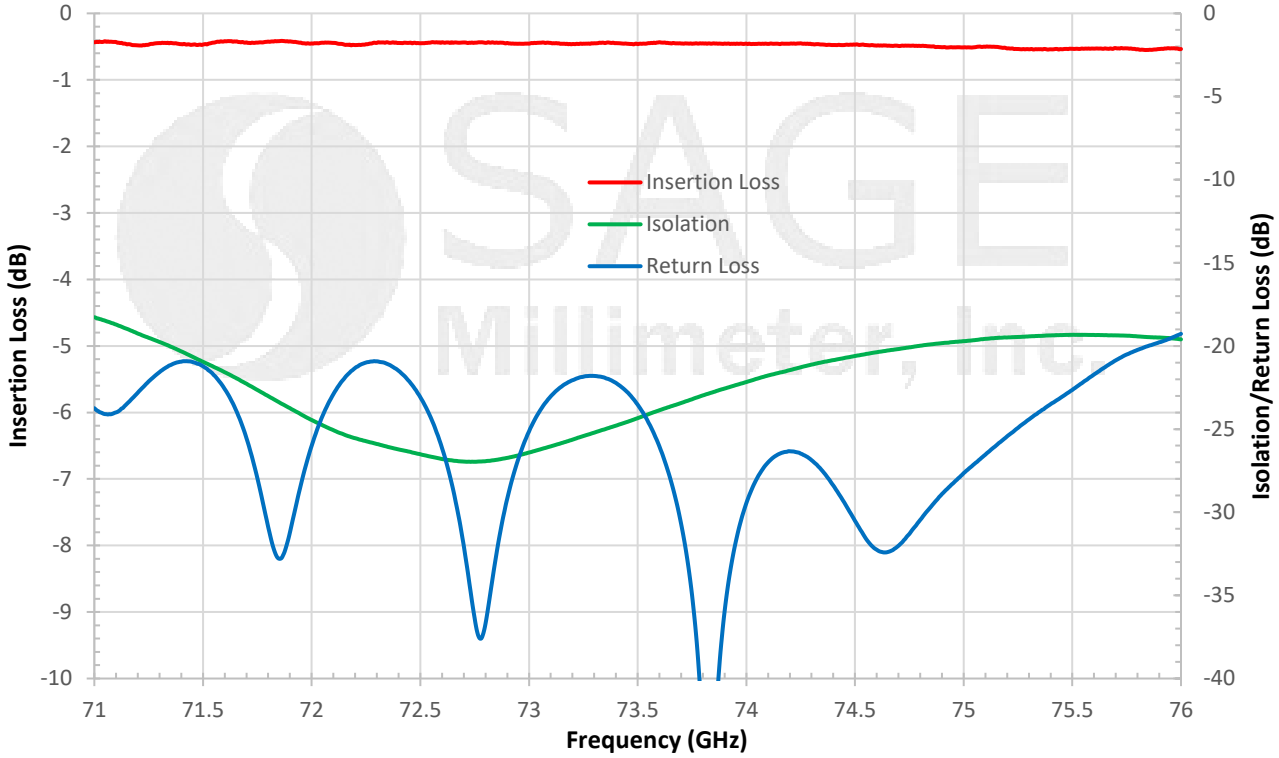
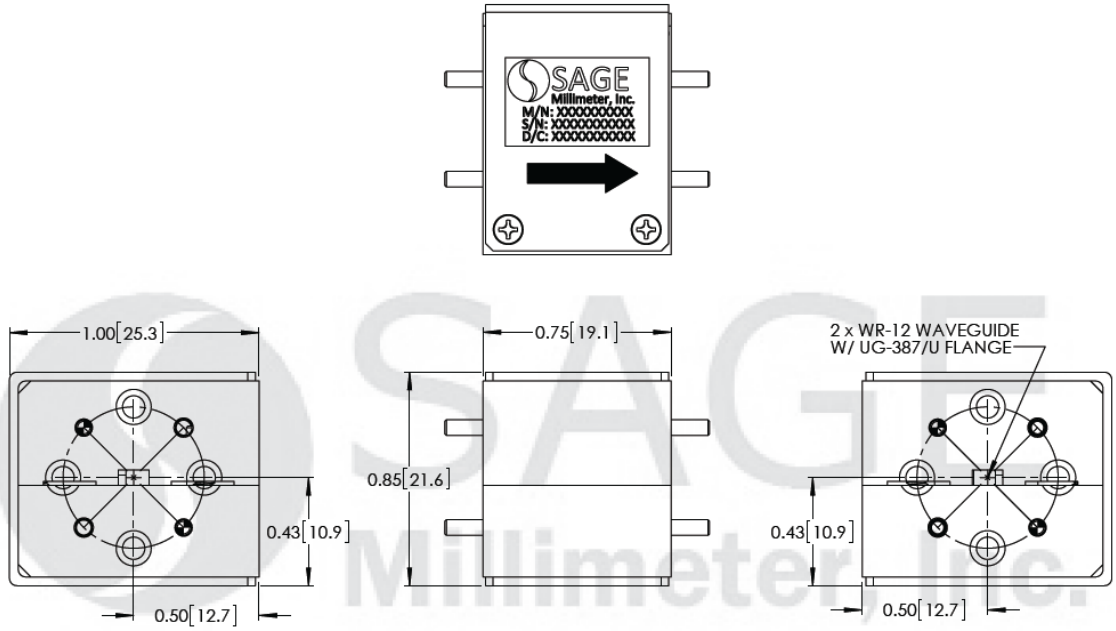
Typical Performance vs. Frequency



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



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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:

- Exceeding absolute maximum ratings will damage the device.
- This device is magnetic sensitive. Keep the device at least 6” away from magnetic fields.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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