SNW-3734330518-22-IJ-V

Advanced

Q Band Waveguide Junction Isolator, 37.0 to 43.0 GHz, Thermal Vacuum Safe

Description:

Model SNW-3734330518-22-IJ-V is a Q band waveguide junction isolator that covers the frequency range of 37.0 to 43.0 GHz. Compared with a Faraday isolator, the waveguide junction isolator offers a lower insertion loss of 0.5 dB nominal and a much shorter insertion length for system integration. As a tradeoff, the waveguide junction isolator only offers an isolation of 18 dB typical. Another feature includes thermal vacuum compatibility. The input and output ports are WR-22 waveguides with UG-383/U anti-cocking flanges. Various configurations and frequency ranges are offered under different model numbers.

Features:

- Low Insertion Loss
- Thermal Vacuum Safe
- Compact Configuration

Applications:

- Space Hardware Testing
- Module Integration
- Thermal Vacuum Chamber

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	37.0 GHz		43.0 GHz
Insertion Loss		0.5 dB	
Isolation		18 dB	
Return Loss		19 dB	
Forward Power Handling		10 W (CW)	
Reverse Power Handling		1 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Input and Output	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Material	Aluminum
Finish	Gold Chem Film and Black Anodized
Weight	0.8 Oz
Insertion Length	1.0”
Outline	NW-IQ-A

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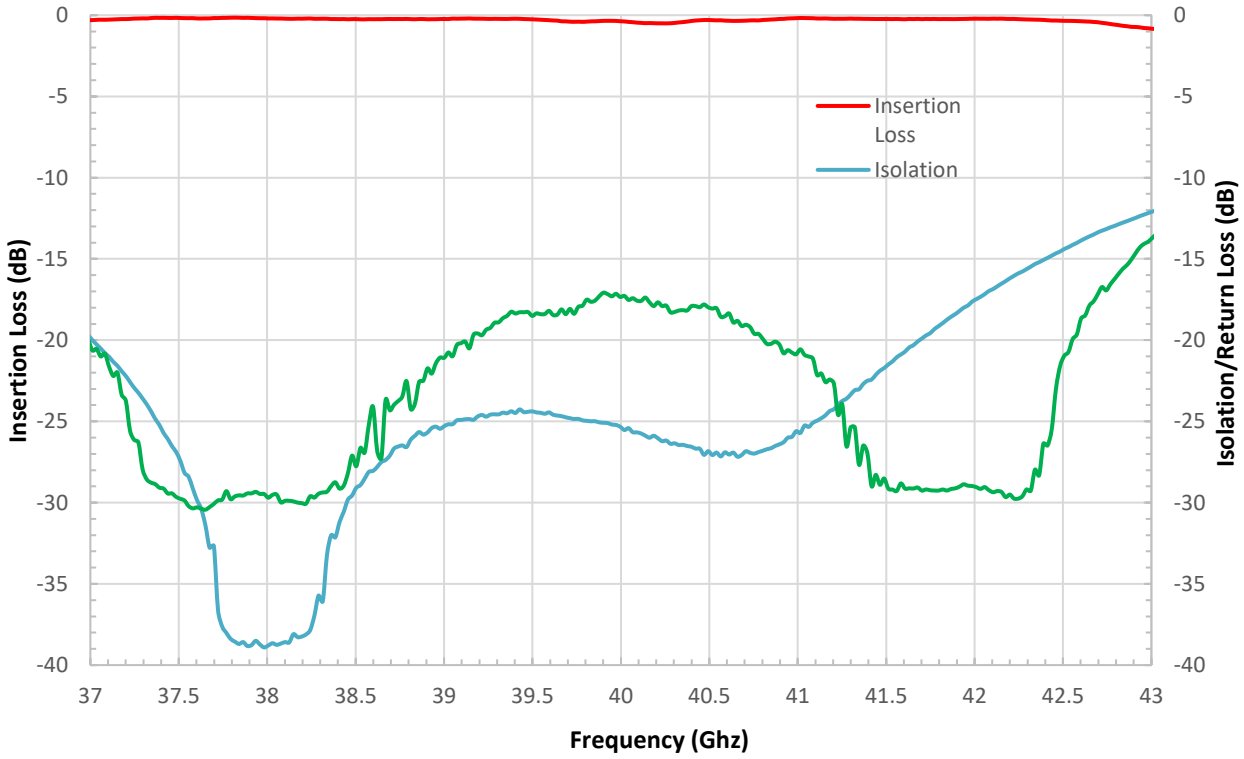
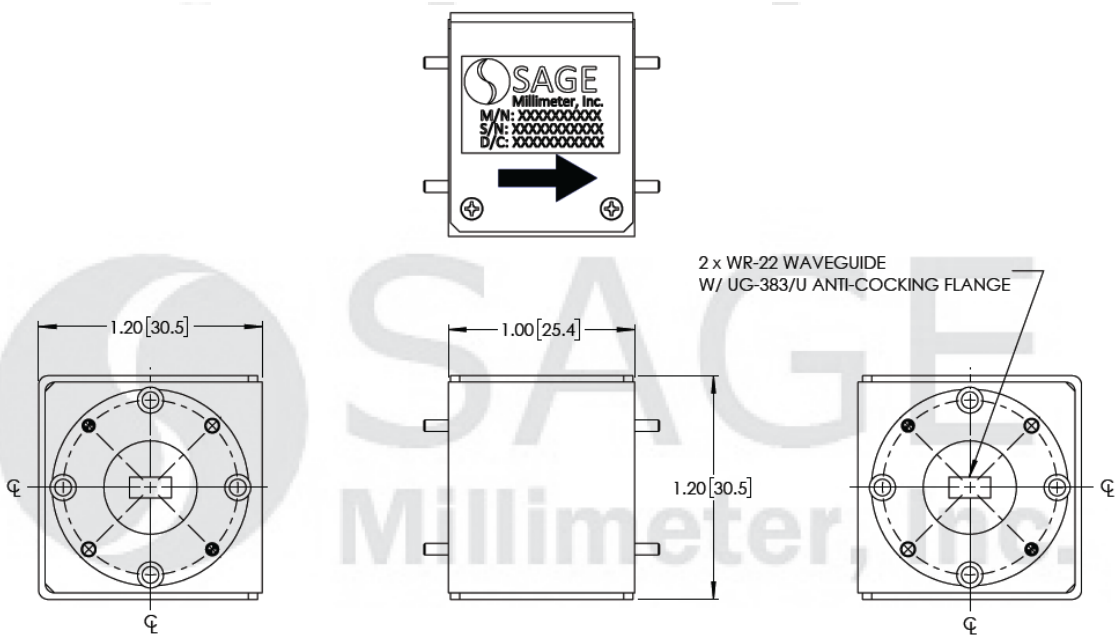
Typical Performance vs. Frequency



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.
- 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 degrade the performance and/or damage the device.

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