SNW-3433630518-28-I8-1

Rev. 1.0

Ka-Band Waveguide Junction Isolator, 33.6 to 36.4 GHz

Description:

Model SNW-3433630518-28-I8-1 is a Ka band waveguide junction isolator that covers the frequency range of 33.6 to 36.4 GHz. Compared with a Faraday isolator, the waveguide junction isolator offers a lower insertion loss of 0.5 dB typical and a much shorter insertion length for system integration. As a tradeoff, the waveguide junction isolator only offers a typical isolation of 18 dB. The input and output ports are WR-28 waveguides with UG-599/U flanges and 3.1 mm thru holes.

Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- Radar System
- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	33.6 GHz		36.4 GHz
Insertion Loss		0.5 dB	
Isolation	17 dB	18 dB	
Return Loss		16 dB	
Forward Power Handling			8 W (CW)
Reverse Power Handling			2 W (CW)
Specification Temperature		+25 ˚C	
Operating Temperature	-45 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Input Port	WR-28 Waveguide with UG-599/U Flange with 3.1 mm Thru Holes
Output Port	WR-28 Waveguide with UG-599/U Flange with 3.1 mm Thru Holes
Body Material	Aluminum
Finish	Chem Film
Weight	0.8 Oz
Insertion Length	0.39”
Outline	NW-IA2-1

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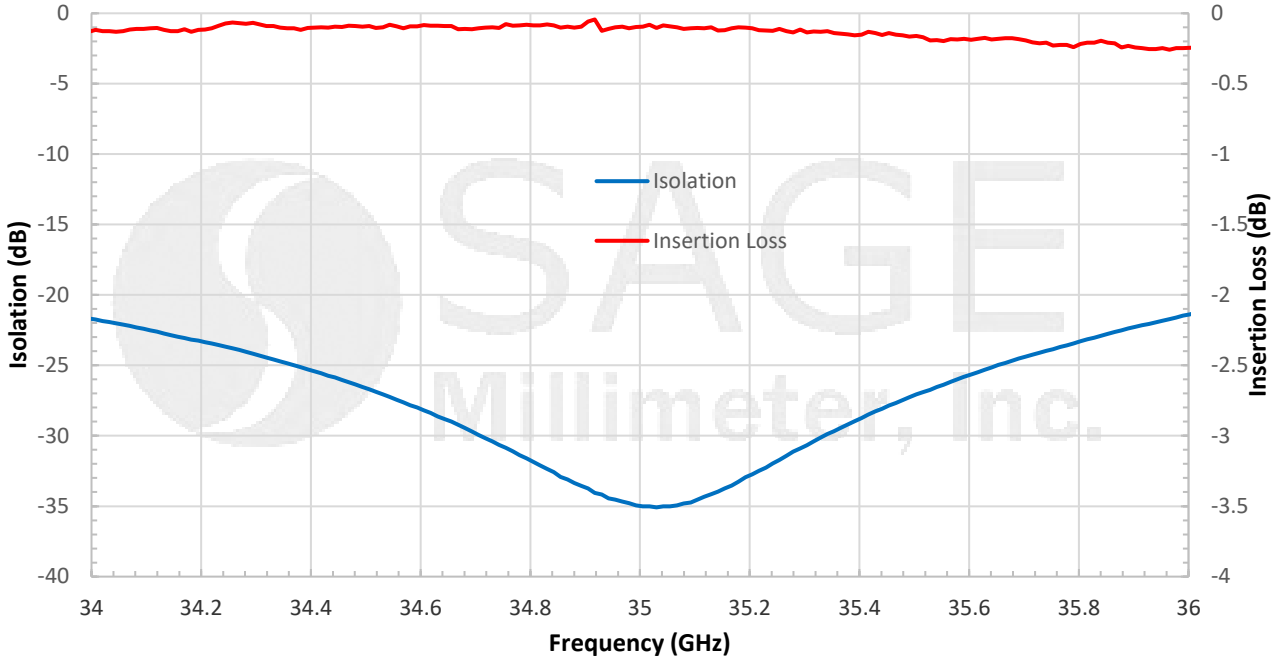
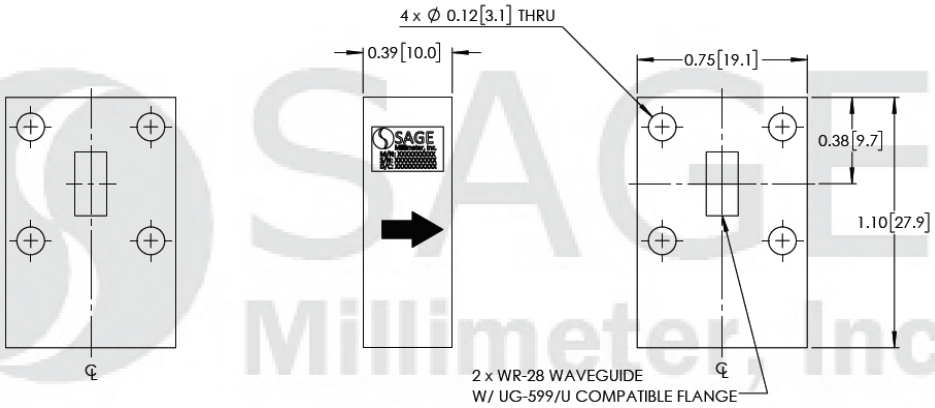
Typical Insertion Loss and Isolation vs. Frequency



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:

- 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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