

## Ka Band Waveguide Junction Isolator, 37 to 40 GHz Band

### Description:

**Model SNW-3734030518-28-I1** is a Ka band waveguide junction isolator that covers the frequency range of 37 to 40 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.



### Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

### Applications:

- Port Isolation
- Module Integration

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	37 GHz		40 GHz
Insertion Loss		0.5 dB	
Isolation	16 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

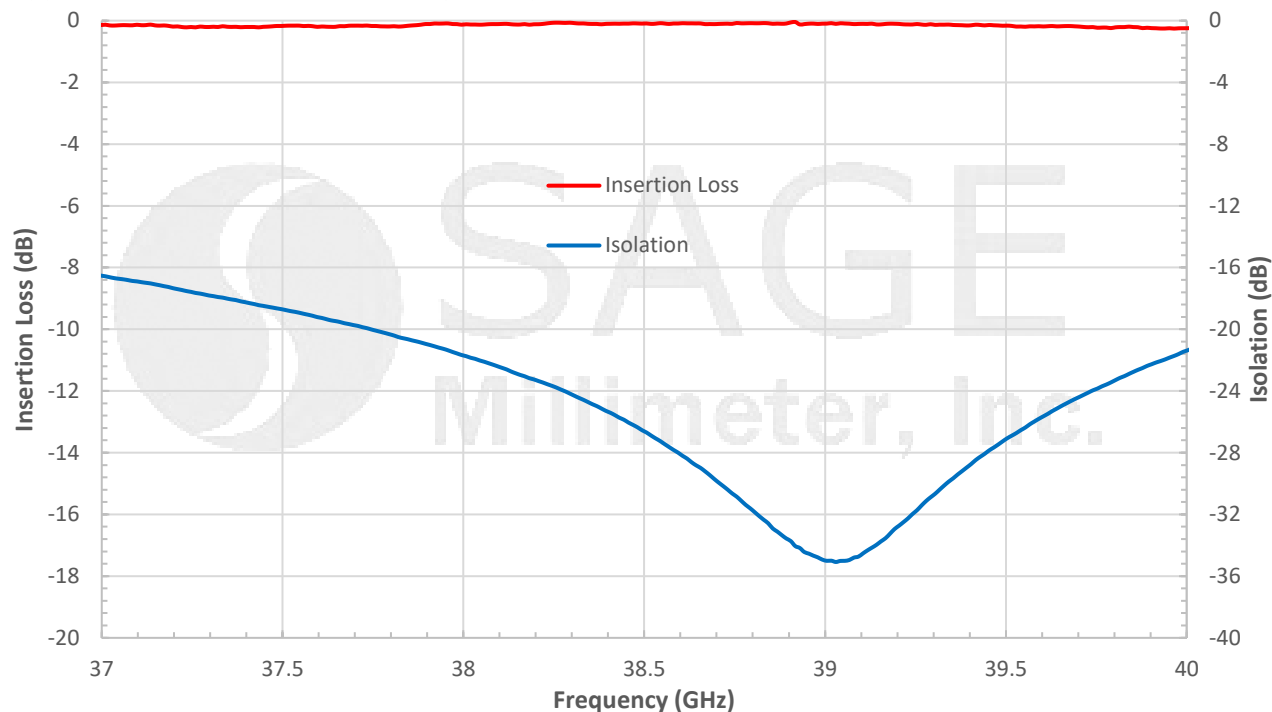
### Mechanical Specifications:

Item	Specification
Input Port	WR-28 Waveguide with UG-599/U Flange
Output Port	WR-28 Waveguide with UG-599/U Flange
Body Material	Aluminum
Finish	Chem Film
Weight	0.8 Oz
Insertion Length	0.39"
Outline	NW-IA2-M

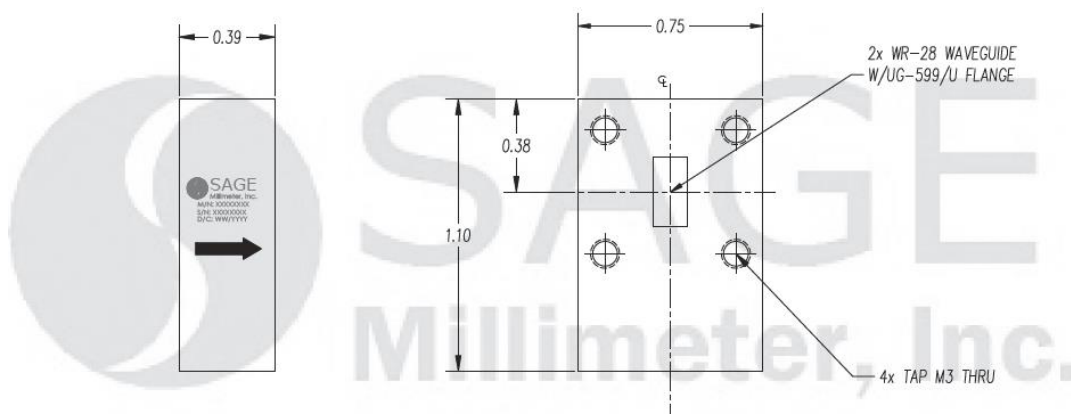


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## Typical Performance vs. Frequency



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



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



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