

V Band Waveguide Junction Isolator, 59 to 61 GHz

Description:

Model SNW-5936131016-15-I1 is a V band waveguide junction isolator that covers the frequency range of 59 to 61 GHz. Compared with a Faraday isolator, the waveguide junction isolator offers a lower insertion loss of 1.0 dB nominal and a much shorter insertion length for system integration. As a tradeoff, the waveguide junction isolator only offers a typical isolation of 16 dB. The input and output ports are WR-15 waveguides with UG-385/U flanges.



Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	59 GHz		61 GHz
Insertion Loss		1.0 dB	
Isolation	14 dB	16 dB	
Return Loss		15 dB	
Forward Power Handling		2 W (CW)	3 W (CW)
Reverse Power Handling		0.5 W (CW)	1 W (CW)
Specification Temperature	A	+25 °C	1
Operating Temperature	-45 °C		+85 °C

Mechanical Specifications:

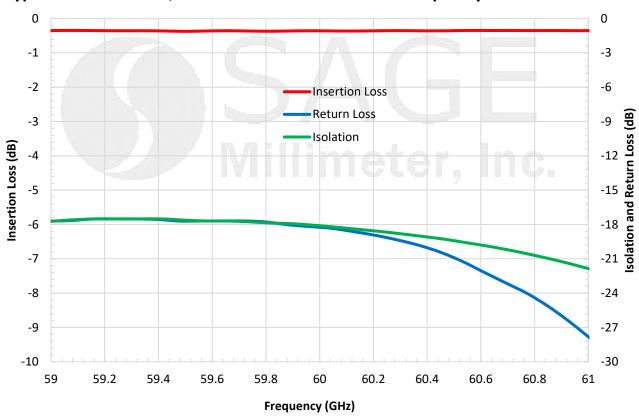
Item	Specification	
RF Ports	WR-15 Waveguide with UG-385/U Flange	
Body Material	Copper	
Body Finish	Gold Plated	
Cover Finish	Black Anodized	
Weight	0.8 Oz	
Insertion Length	0.75"	
Outline	NW-IV	



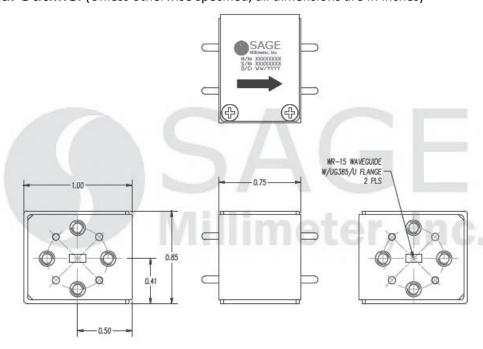
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Typical Insertion Loss, Isolation and Return Loss vs. Frequency



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





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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 degrade the performance and/or damage the device.





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