

V Band Waveguide Junction Isolator, 54 to 58 GHz

Description:

Model SNW-5435830518-15-I1 is a V band waveguide junction isolator that covers the frequency range of 54 to 58 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 a typical isolation of 18 dB. The input and output ports are WR-15 waveguides with UG-385/U anti-cocking flange.



Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	54 GHz		58 GHz
Insertion Loss		0.5 dB	
Isolation	16 dB	18 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		+25 °C	
Operating Temperature	-40 °C		+85 °C

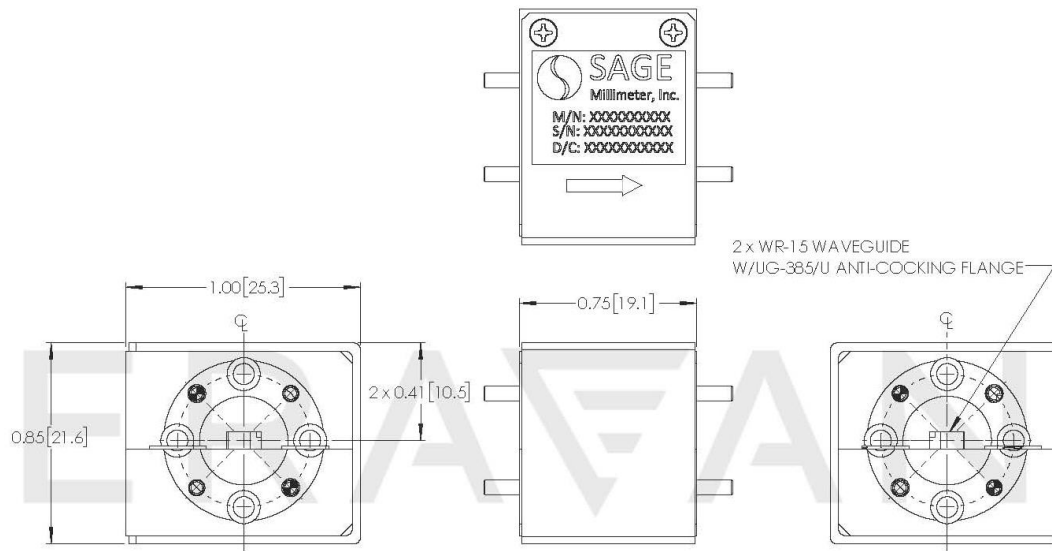
Mechanical Specifications:

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



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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 degrade the performance and/or damage the device.