

W Band Waveguide Junction Circulator, 104 to 111 GHz

Description:

Model SNW-1041141018-10-C1 is a W band waveguide junction circulator that covers the frequency range of 104 to 111 GHz. The waveguide junction circulator is designed and manufactured to provide a low insertion loss of 1 dB nominal, a typical isolation of 18 dB, and a much shorter insertion length for system integration. The RF ports are WR-10 waveguides with UG-387/U-M anti-cocking flange. The higher port isolation version is offered under the model number of **SNW-1041141535-10-CM**, with port isolation up to 35 dB.



Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- Radar Systems
- Communication Systems
- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	104 GHz		111 GHz
Insertion Loss		1.0 dB	1.5 dB
Isolation	14 dB	18 dB	
Return Loss	13 dB	16 dB	
Forward Power Handling		2 W (CW)	3 W (CW)
Reverse Power Handling			3 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

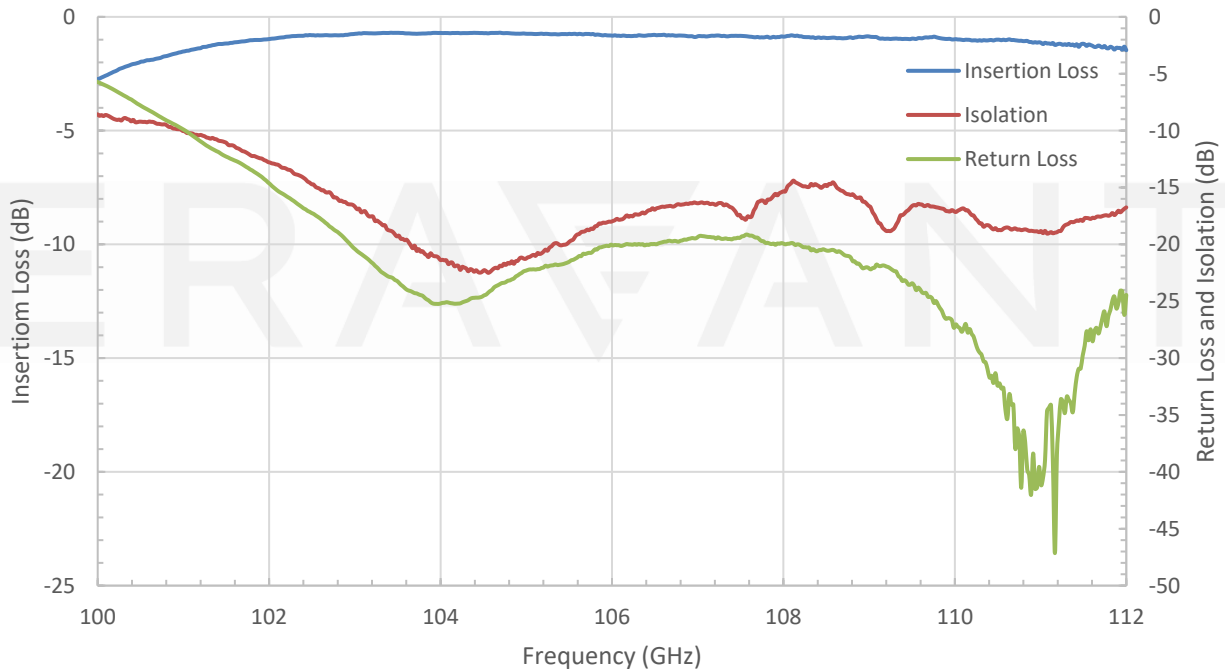
Mechanical Specifications:

Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Body Material	Aluminum
Body Finish	Gold Plated
Cover Finish	Black Anodized
Weight	0.8 Oz
Size	1" (L) X 1" (W) X 0.85" (H)
Outline	NW-CW-A

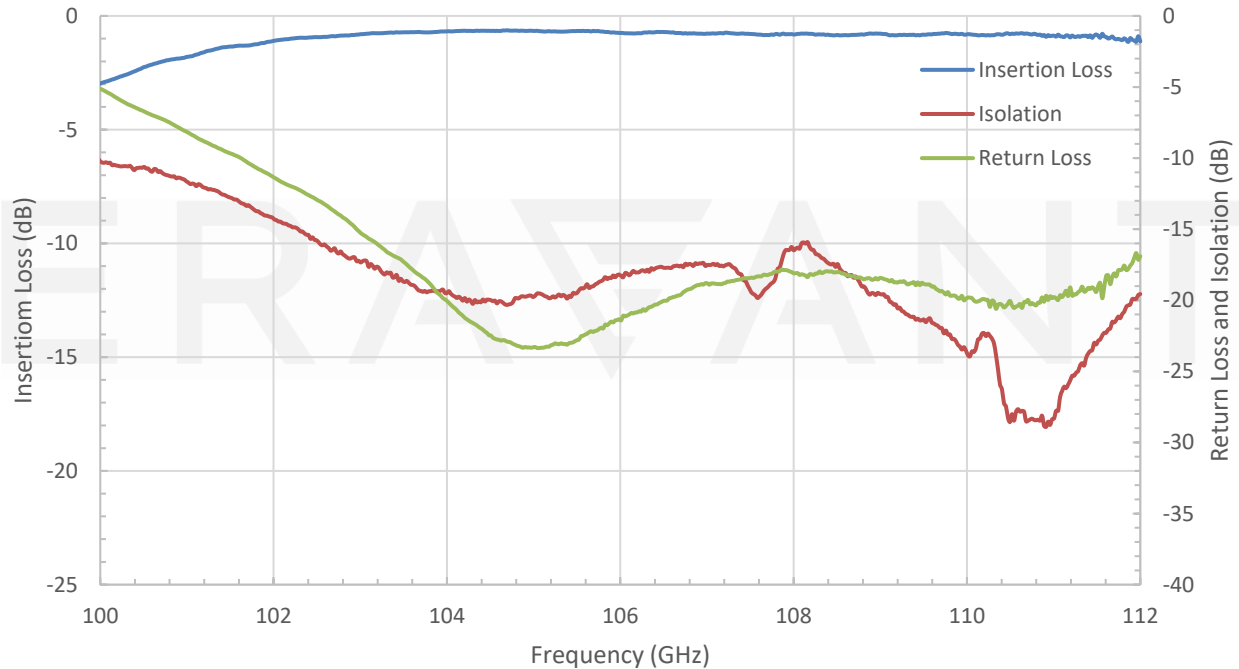


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Typical Performance vs. Frequency (Port 2 to Port 1)

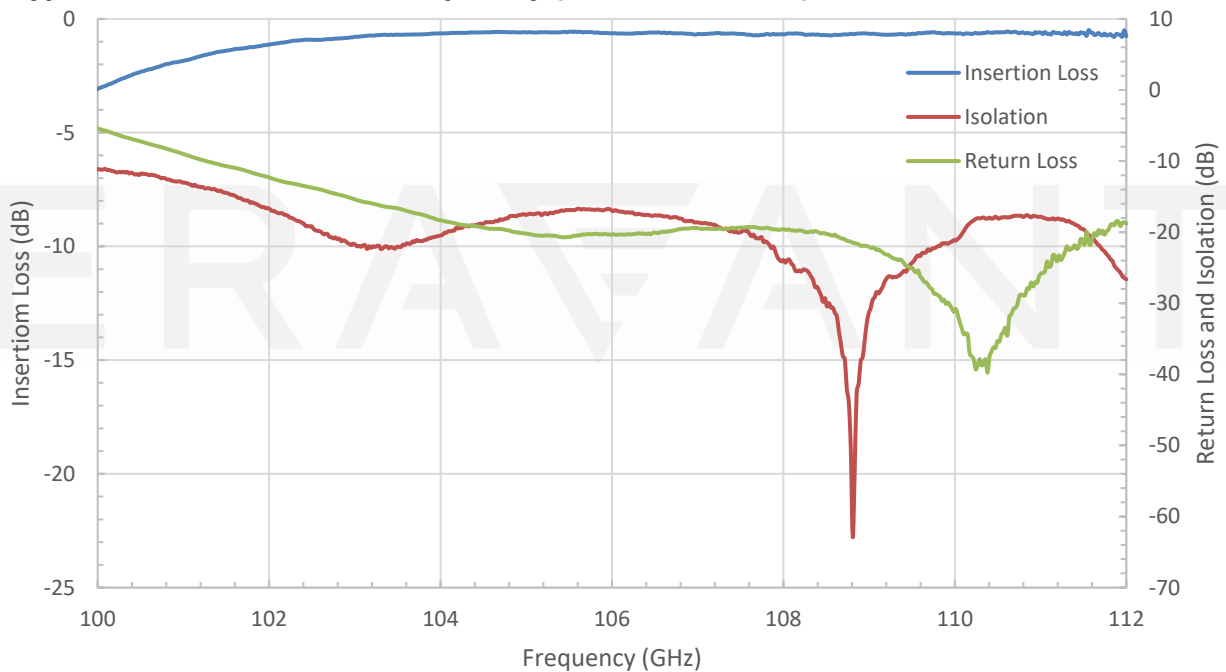


Typical Performance vs. Frequency (Port 3 to Port 2)

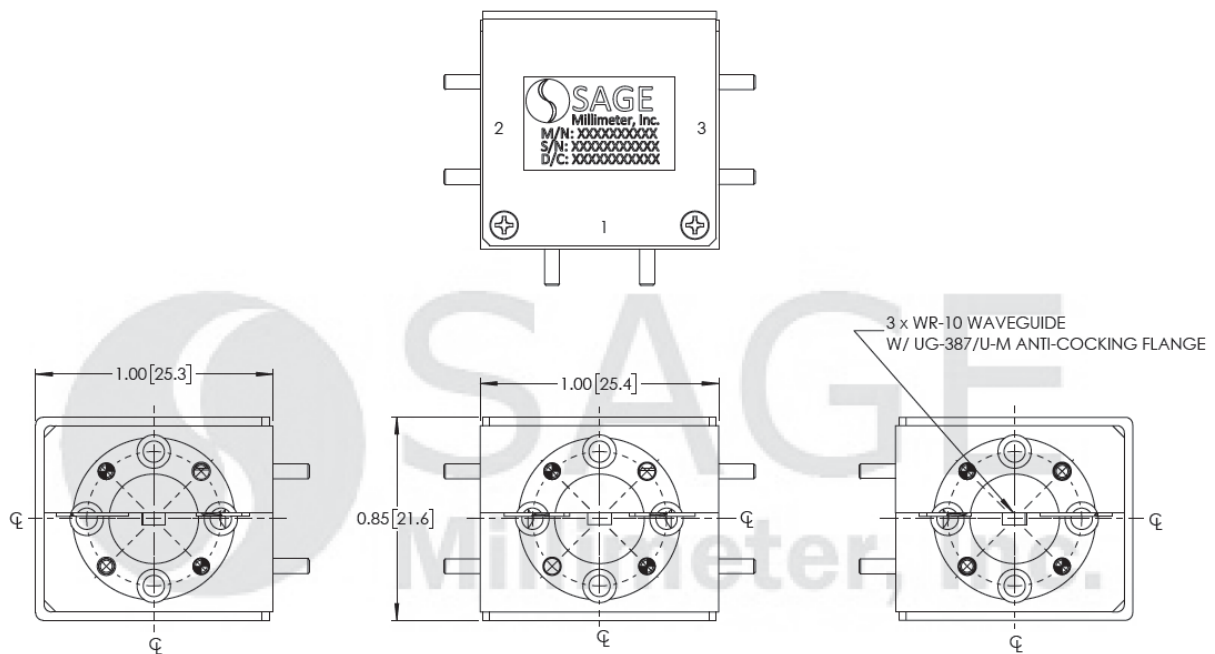


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Typical Performance vs. Frequency (Port 1 to Port 3)



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, slightly.
- All testing was performed under +25 °C case temperature.
- Eravant 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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