



## W Band Waveguide Junction Circulator, 101 to 109 GHz

### Description:

**Model SNW-1041141018-10-C1-2** is a W band waveguide junction circulator that covers the frequency range of 101 to 109 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 across the frequency range, and a much shorter insertion length for system integration. Isolation will generally be higher closer to the center frequency. The RF ports are WR-10 waveguides with UG-387/U-M anti-cocking flange.



### Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration
- Wide Frequency Coverage

### Applications:

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

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	101 GHz		109 GHz
Insertion Loss		1.0 dB	
Isolation		18 dB	
Return Loss		15 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:

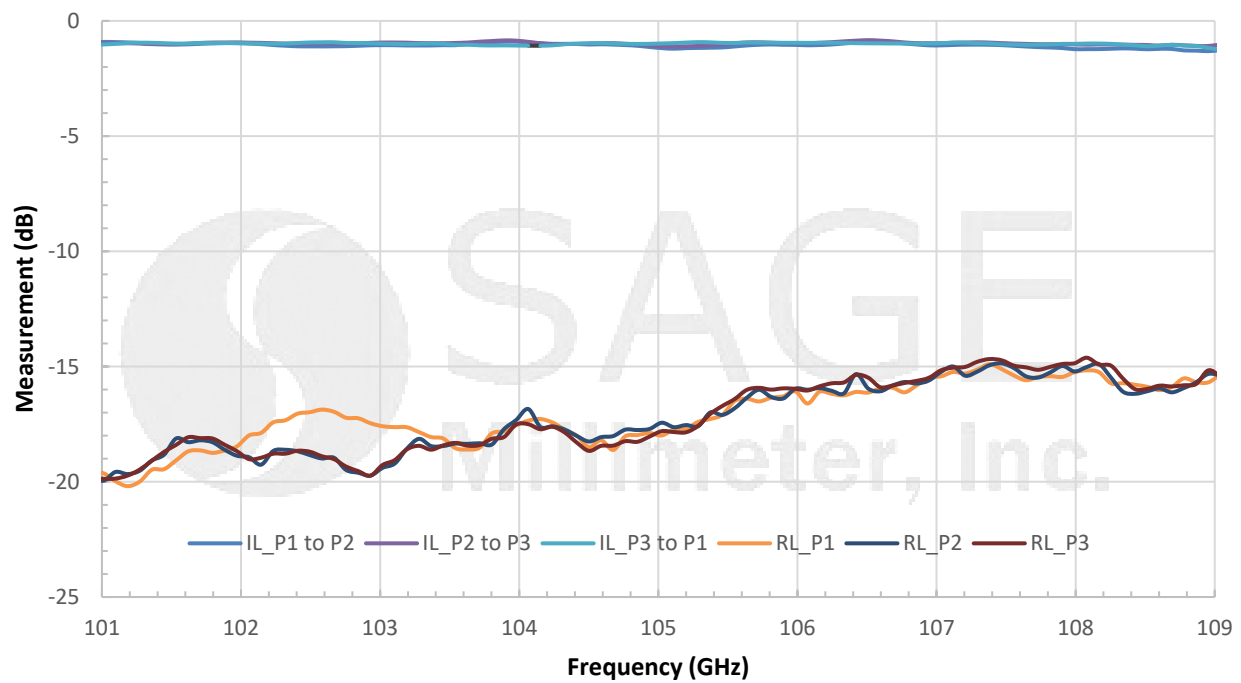
Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Body Material	Aluminum
Body Finish	Gold Plated
Cover Finish	Black Anodized
Weight	0.8 Oz
Size	1" (L) X 1" (W) X 0.85" (H)
Outline	NW-CW-A



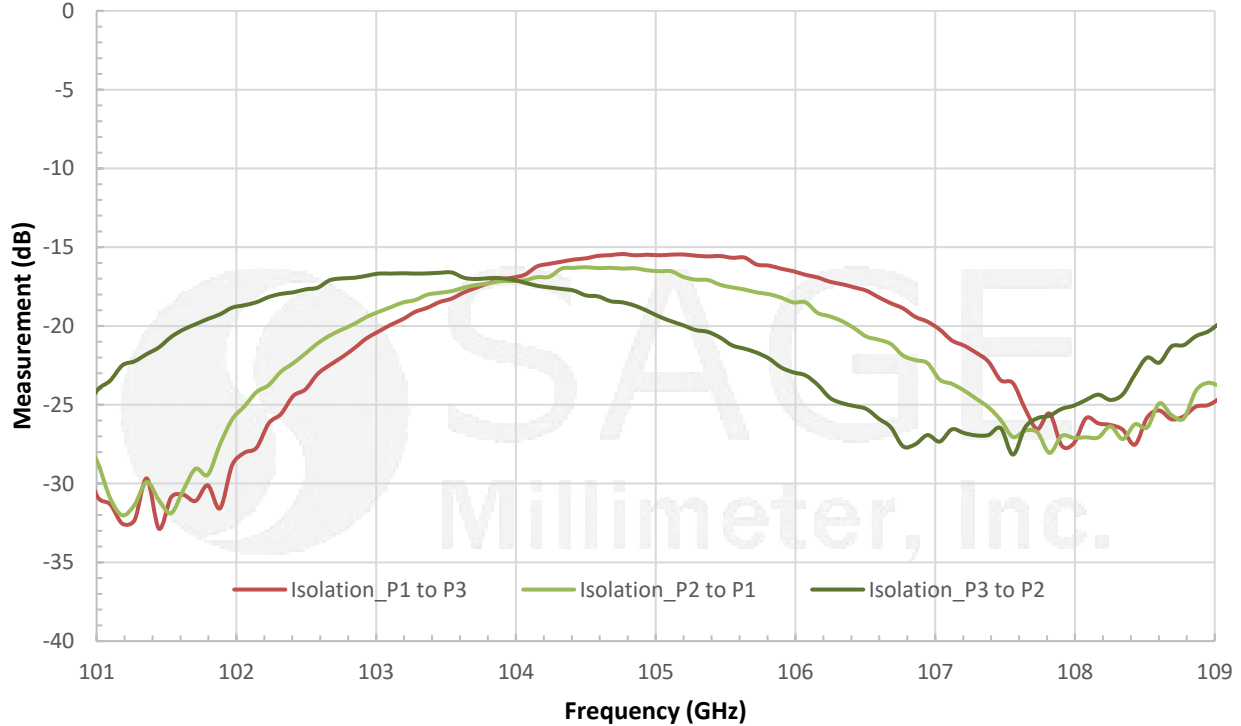


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Typical Performance vs Frequency



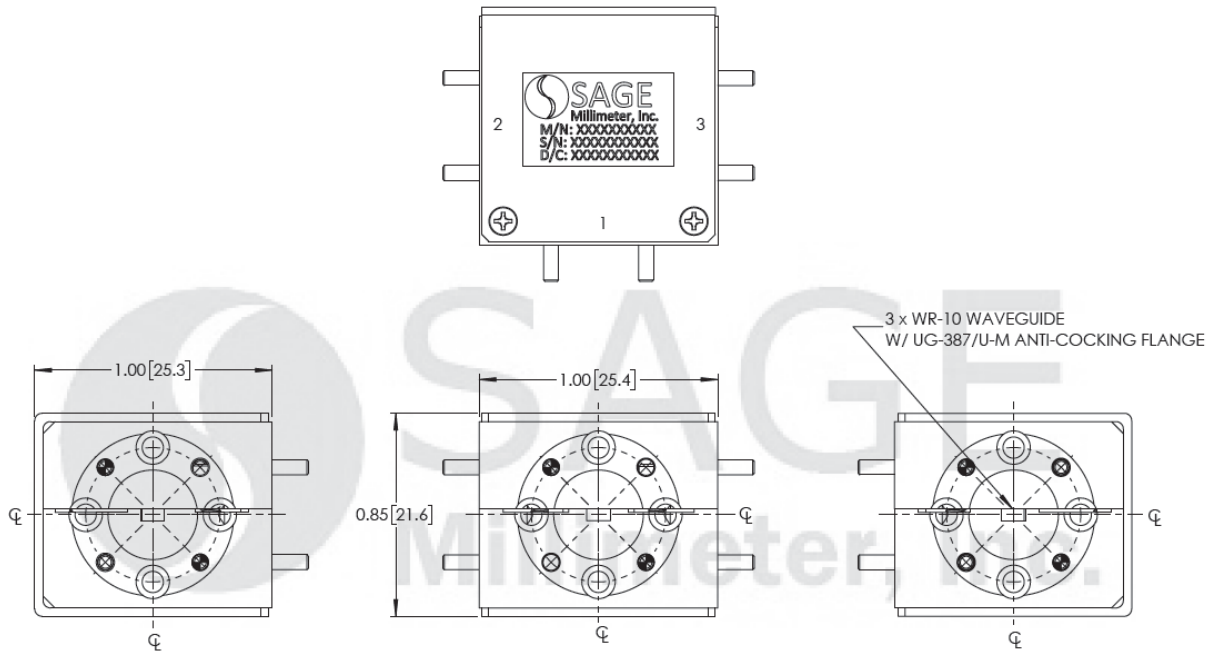
Typical Performance vs Frequency





## W Band Waveguide Junction Circulator, 101 to 109 GHz

**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



**Note:**

- 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.

