SNW-5836230518-15-C1

V Band Waveguide Junction Circulator, 58 to 62 GHz

SNW-5836230518-15-C1 is a V band waveguide junction circulator that covers the frequency range of 58 to 62 GHz. The waveguide junction circulator is designed and manufactured to provide a low insertion loss of 0.5 dB typical, a nominal isolation of 18 dB, and a much shorter insertion length for system integration. The RF ports are WR-15 waveguides with UG-385/U anti-cocking flanges. The higher port isolation version is offered under the model number of **SNW-5836231235-15-CM,** with port isolation up to 35 dB.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	58 GHz		62 GHz
Insertion Loss		0.5 dB	0.8 dB
Isolation	15 dB	18 dB	
Return Loss	15 dB	18 dB	
Forward Power Handling			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-15 Waveguide with UG-385/U Anti-Cocking Flange
Body Material	Aluminum
Body Finish	Gold Plated
Cover Finish	Black Anodized
Weight	0.8 Oz
Outline	NW-CV-A

ECCN

EAR99

FEATURES

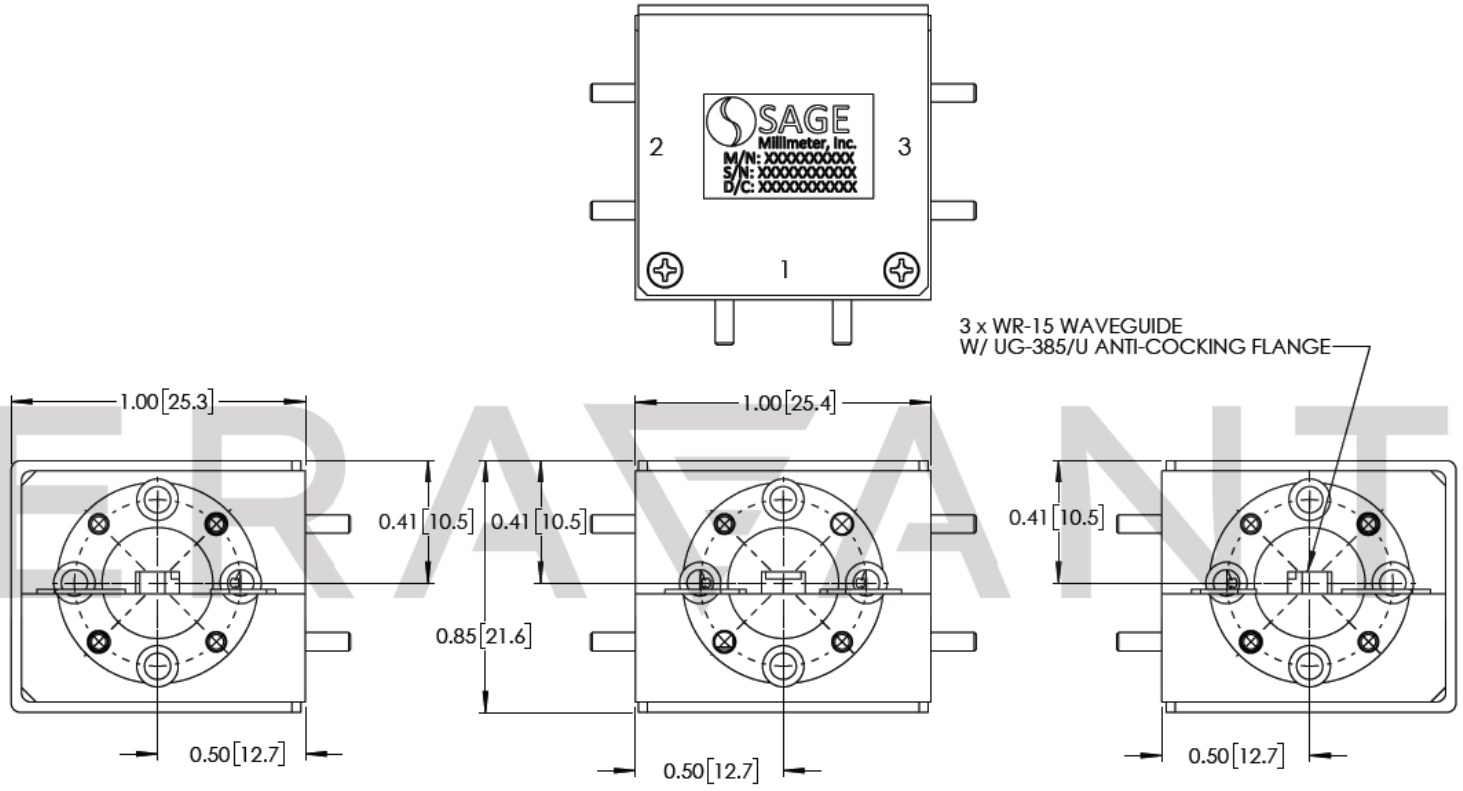
- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

APPLICATIONS

- Module Integration
- Port Isolation

SUPPLEMENTAL DETAILS

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



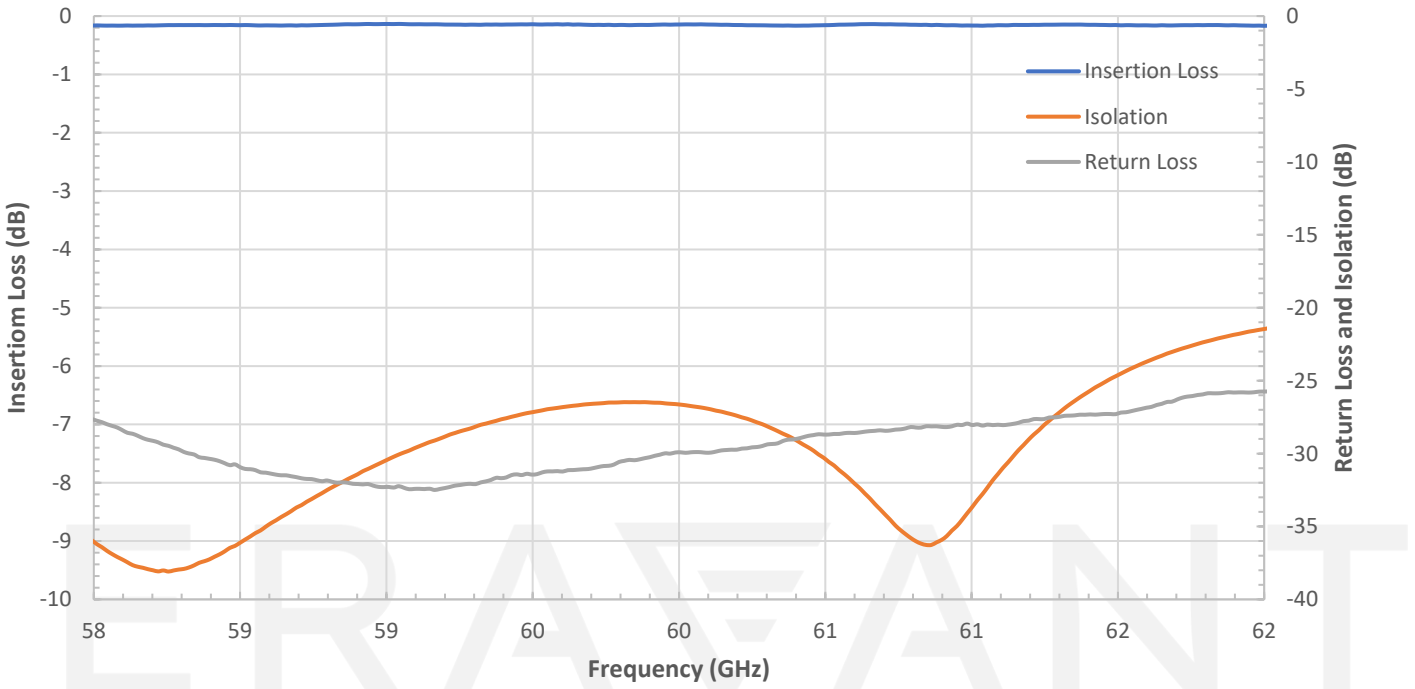
NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

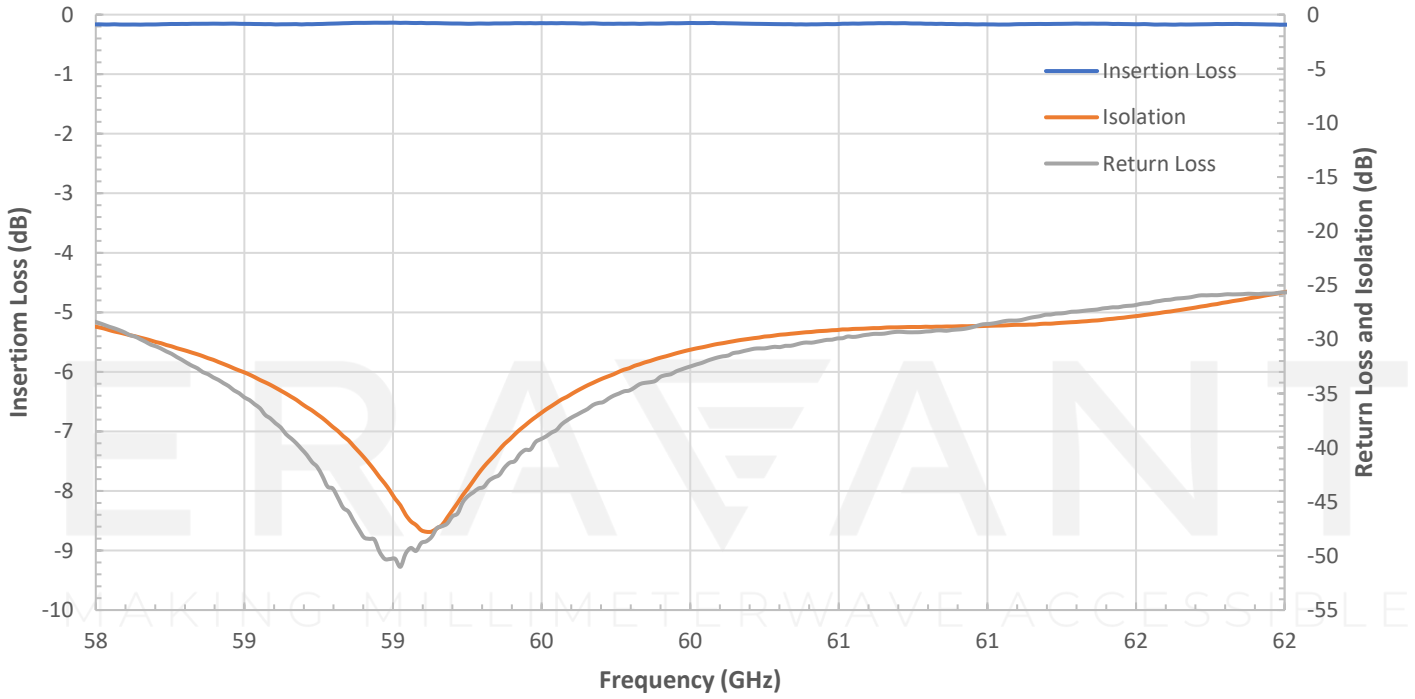
CAUTION:

- Exceeding absolute maximum ratings will damage the device.
- This device is magnetic sensitive. Keep the device at least 6” away from magnetic fields.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended

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



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



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