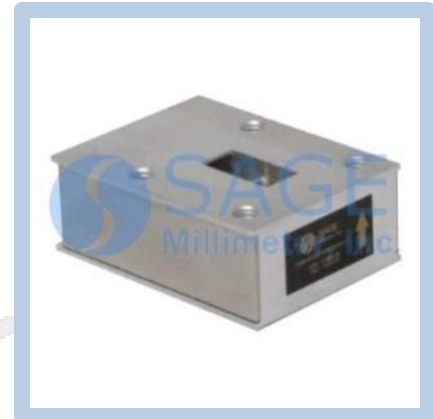




WR-51 Waveguide Junction Isolator, 18 to 21 GHz Band

Description:

Model SNW-1832130418-51-I1 is a WR-51 waveguide junction isolator that covers the frequency range of 18 to 21 GHz. The waveguide junction isolator is designed and manufactured to provide low insertion loss and moderate isolation for system integration. Compared with a Faraday isolator, it offers lower insertion loss and a much shorter insertion length. The WR-51 isolator offers 18 dB minimum isolation and 0.4 dB maximum insertion loss with good flatness. The input and output ports are WR-51 waveguides with UG-419/U-M Square flanges. The isolator implements a U shaped magnet shielding steel cover to protect it from magnetic field interface.



Features:

- Low insertion loss
- Moderate isolation
- Compact Configuration

Applications:

- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency**	18 GHz		21 GHz
Insertion Loss			0.4 dB
Isolation	18 dB		
Return Loss		15 dB	
Forward Power Handling		5 W (CW)	
Reverse Power Handling		2 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

**Various frequency ranges are offered under different model numbers.

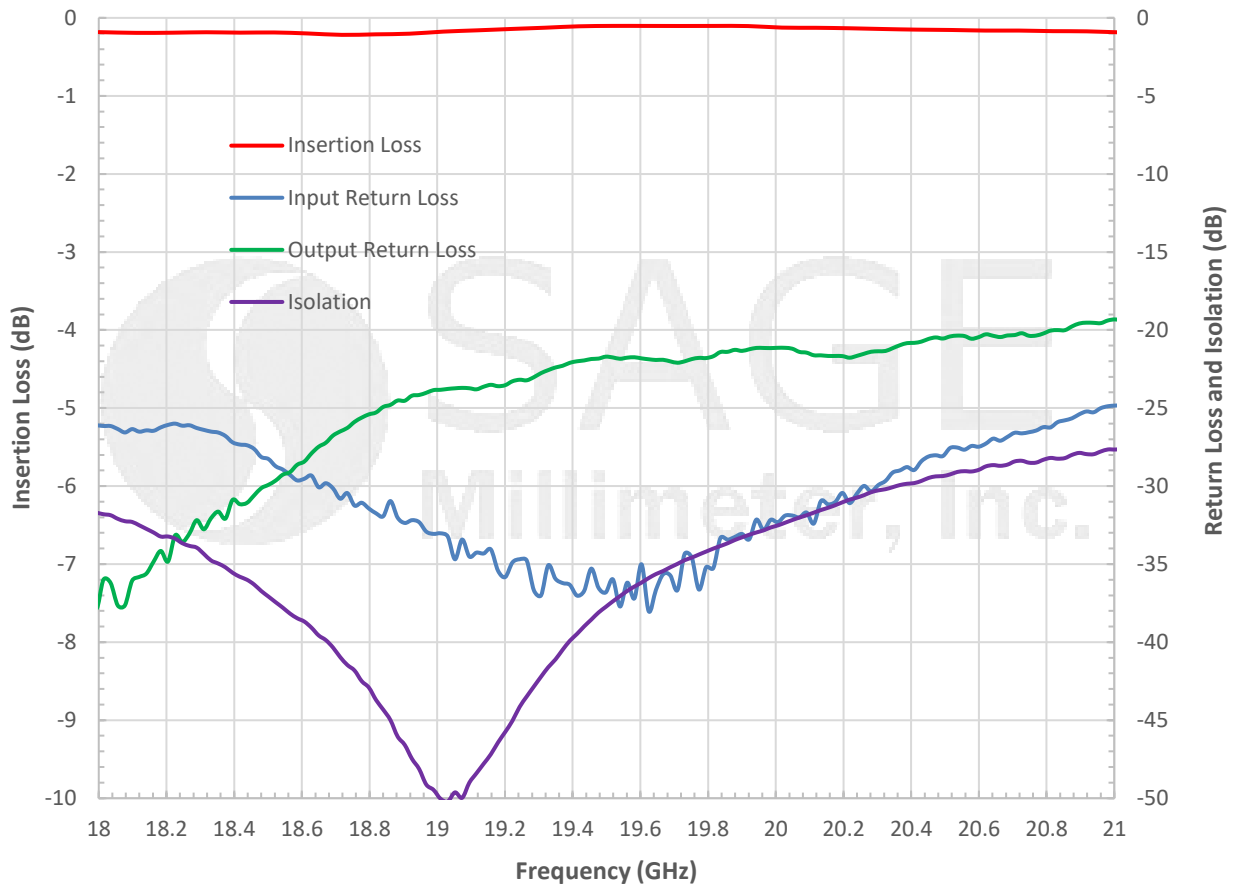
Mechanical Specifications:

Item	Specification
Input Port	WR-51 Waveguide with UG-419/U-M Flange
Output Port	WR-51 Waveguide with UG-419/U-M Flange
Case Material	Aluminum
Finishing	Chem Film
Weight	1.6 Oz
Insertion Length	0.59"
Outline	NW-I5-J1

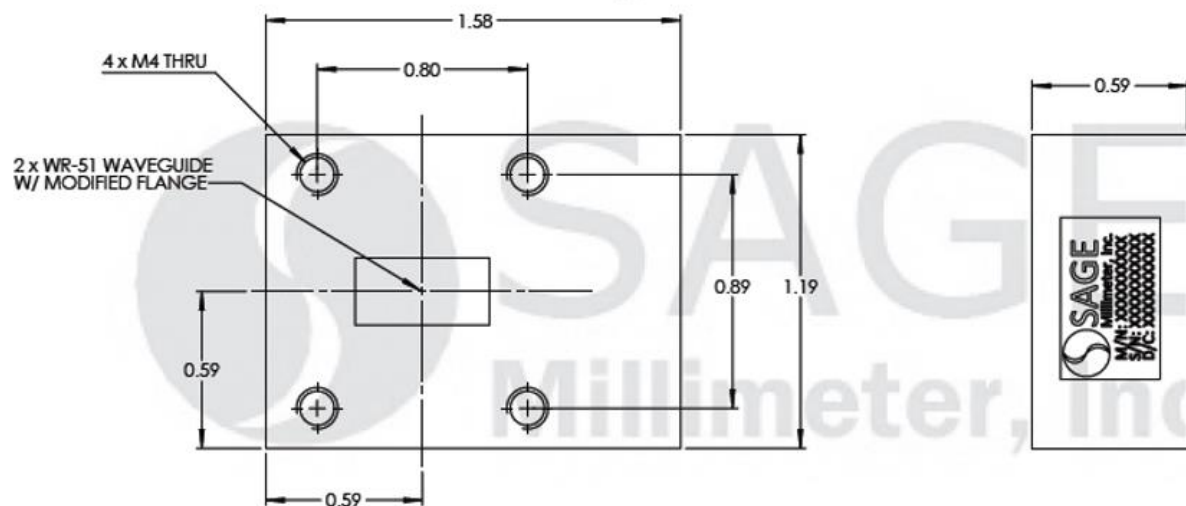


WR-51 Waveguide Junction Isolator, 18 to 21 GHz Band

Typical Performance vs. Frequency



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



WR-51 Waveguide Junction Isolator, 18 to 21 GHz Band

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.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings of the device will damage the device.
- The device is magnetically sensitive. Keep a safe distance from magnetic fields.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

