SNW-1731930220-42-I1

Rev. 1.0

K Band Waveguide Junction Isolator, 17.2 to 19.4 GHz

Description:

Model SNW-1731930220-42-I1 is a K band waveguide junction isolator that covers the frequency range of 17.2 to 19.4 GHz. Compared with a Faraday isolator, the waveguide junction isolator offers a lower insertion loss and a much shorter insertion length for system integration. As a tradeoff, the waveguide junction isolator offers a typical insertion loss of 0.2 dB and an isolation of 20 dB, respectively. The isolator is magnetic shielded and is readily for system integration. The input and output ports are WR-42 waveguides UG-595/U flanges with 4-40 threaded holes.

Features:

- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

Applications:

- Communication Systems
- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	17.2 GHz		19.4 GHz
Insertion Loss		0.2 dB	0.3 dB
Isolation	18 dB	20 dB	
Return Loss		15 dB	
Forward Power Handling		5 W (CW)	
Reverse Power Handling		1 W (CW)	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
RF Input/ Output Ports	WR-42 Waveguides with UG-595/U Flanges, 4-40 Threaded Holes
Magnetic Shielded	Yes
Case Material	Aluminum
Finish	Chem Film
Weight	2.5 Oz
Insertion Length	1.56”
Outline	NW-IK-P1

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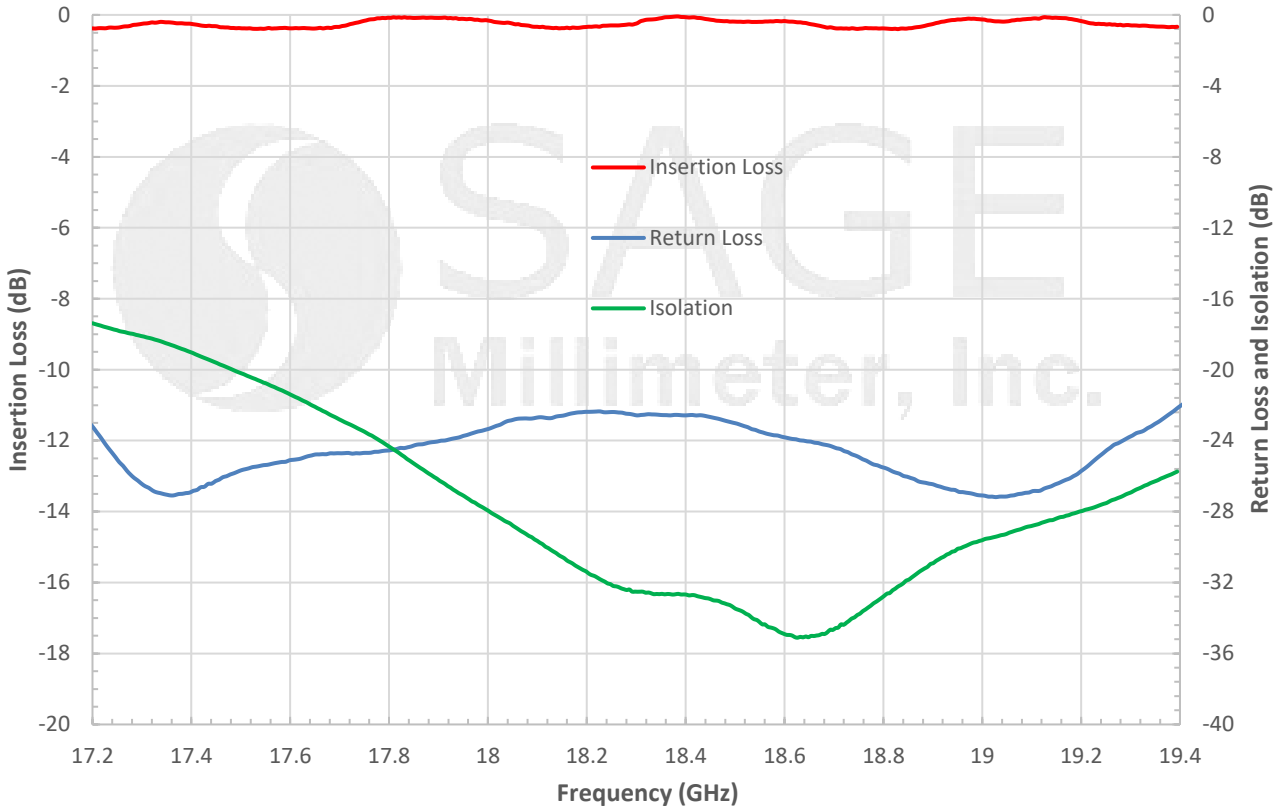
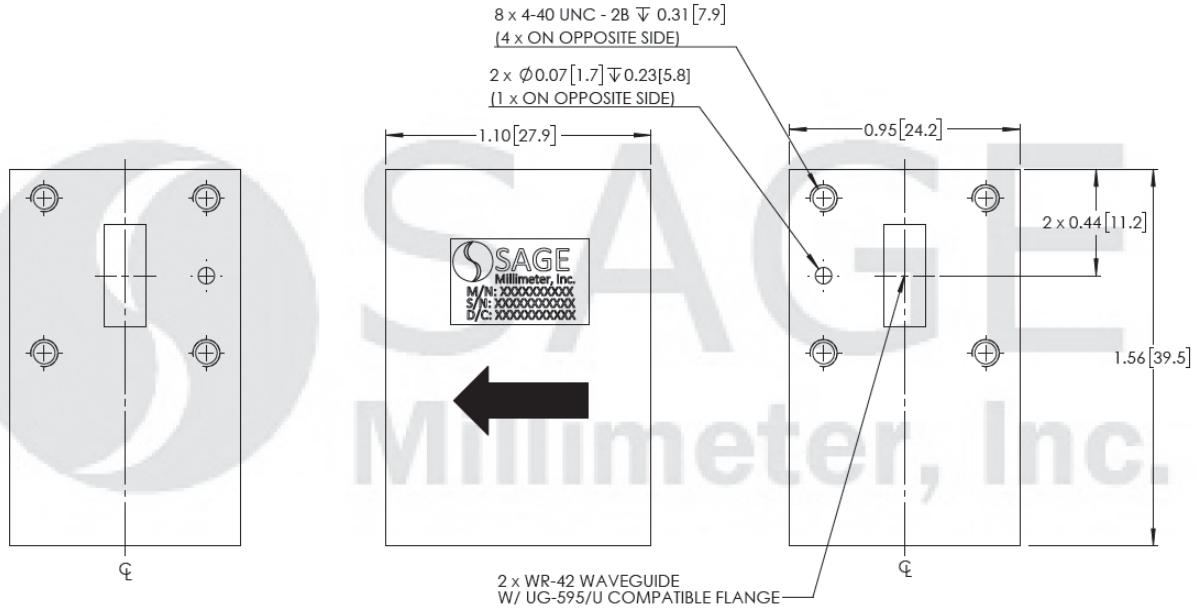
Typical Performance vs. Frequency



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.
- 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.

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