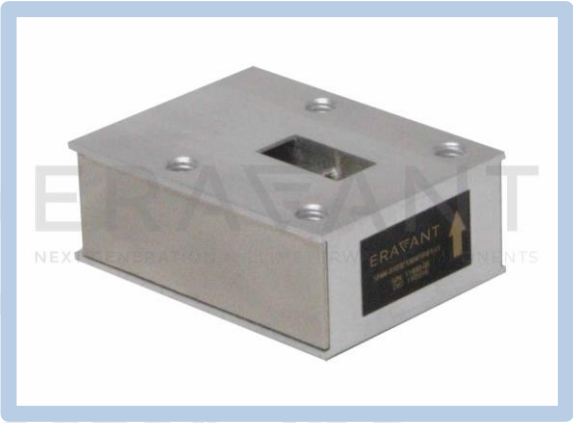
SNW-1932130420-42-IE-V

Rev 1.0

K Band Waveguide Junction Isolator, 18.6 to 21.4 GHz

Description:



Model SNW-1932130420-42-IE-V is a K band, TVAC safe waveguide junction isolator that covers the frequency range of 18.6 to 21.4 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 0.4 dB and an isolation of 20 dB, respectively. The isolator is readily for high volume production system integration. The input and output ports are WR-42 waveguides UG-595/U compatible flanges.

Features:

- High Performance
- Compact Configuration
- Volume Production Ready

Applications:

- Communication Systems
- Port Isolation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18.6 GHz		21.4 GHz
Insertion Loss		0.4 dB	0.7 dB
Isolation	16 dB	20 dB	
Return Loss	16 dB	20 dB	
Forward Power Handling			10 W (CW)
Reverse Power Handling			5 W (CW)
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
RF Input Port	WR-42 Waveguides with UG-595/U Compatible Flange
RF Output Port	WR-42 Waveguides with UG-595/U Compatible Flange
Magnetic Shield	No
Case Material	Aluminum
Finish	Chem Film
Insertion Length	0.5”
Outline	NW-IK-NG2

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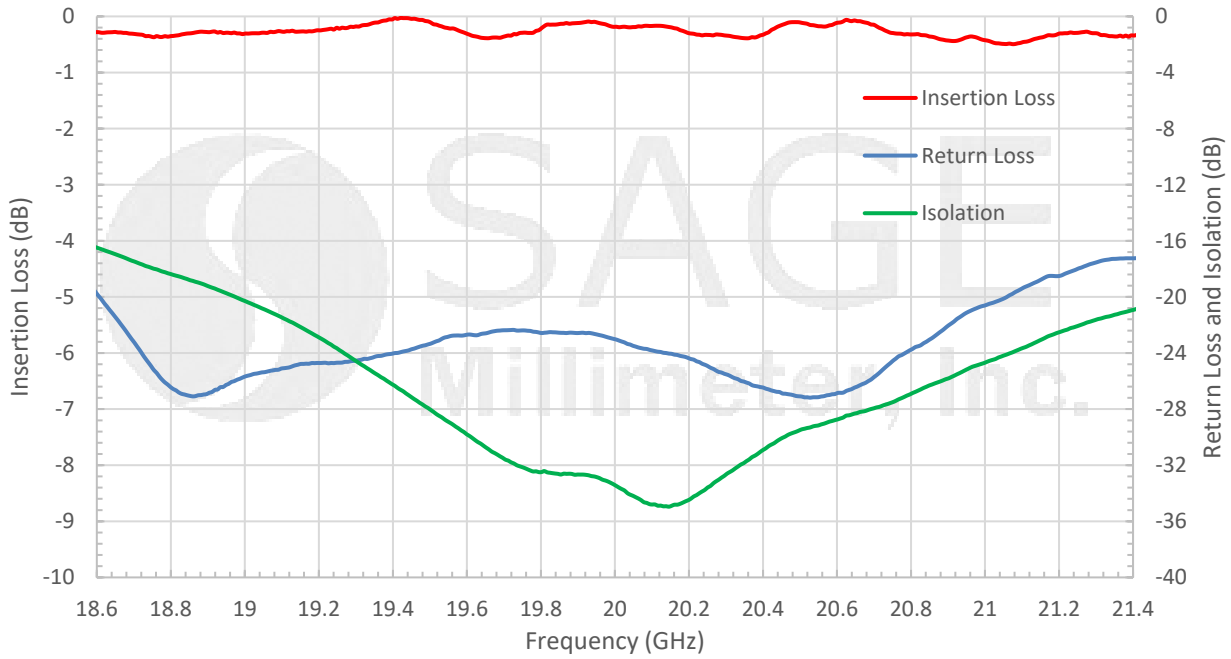
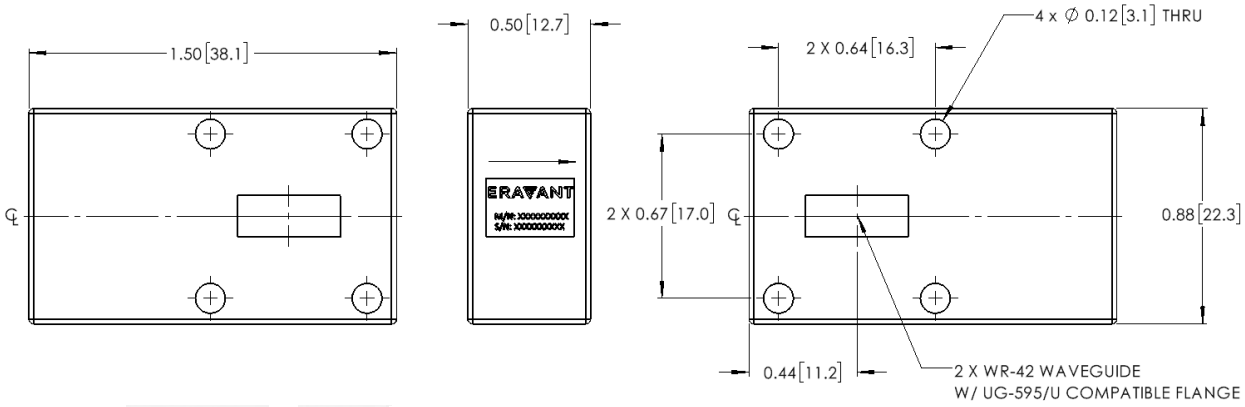
Typical Performance vs. Frequency



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



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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