

SWP-40360304-19-E1

Rev. 1.0

WR-19 Waveguide Power Divider, 4-Way, Inline, 40 to 60 GHz

Description:

Model SWP-40360304-19-E1 is a U-band, 4-way waveguide power divider that operates across the frequency range of 40 to 60 GHz. The power divider offers a typical insertion loss of 1.0 dB at each output port and a typical adjacent port isolation of 20 dB and non-adjacent port isolation of 30 dB. The ports are well balanced and in phase for either power dividing or power combining applications across the full band. This model comes as an inline design with WR-19 waveguides and UG-383/U-M anti-cocking flanges. Other configurations are available under different model numbers.



Features:

- Full Waveguide Band Operation
- Low Insertion Loss
- High Isolation
- Inline Configuration

Applications:

- Power Combining and Dividing
- Test Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency		40 GHz		60 GHz
Insertion Loss			1.0 dB	
Power Unbalance			±0.50 dB	
Isolation	Adjacent Ports		20 dB	
	Non-Adjacent Ports		30 dB	
Return Loss	Input Port		18 dB	
	Output Ports		18 dB	
Specification Temperature			+25 °C	
Operating Temperature		-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-19 Waveguide with UG-383/U-M Anti-Cocking Flange
Port Separation	1.3"
Material	Aluminum
Finish	Gold Plated
Weight	9.0 Oz
Outline	WP-U4I-A



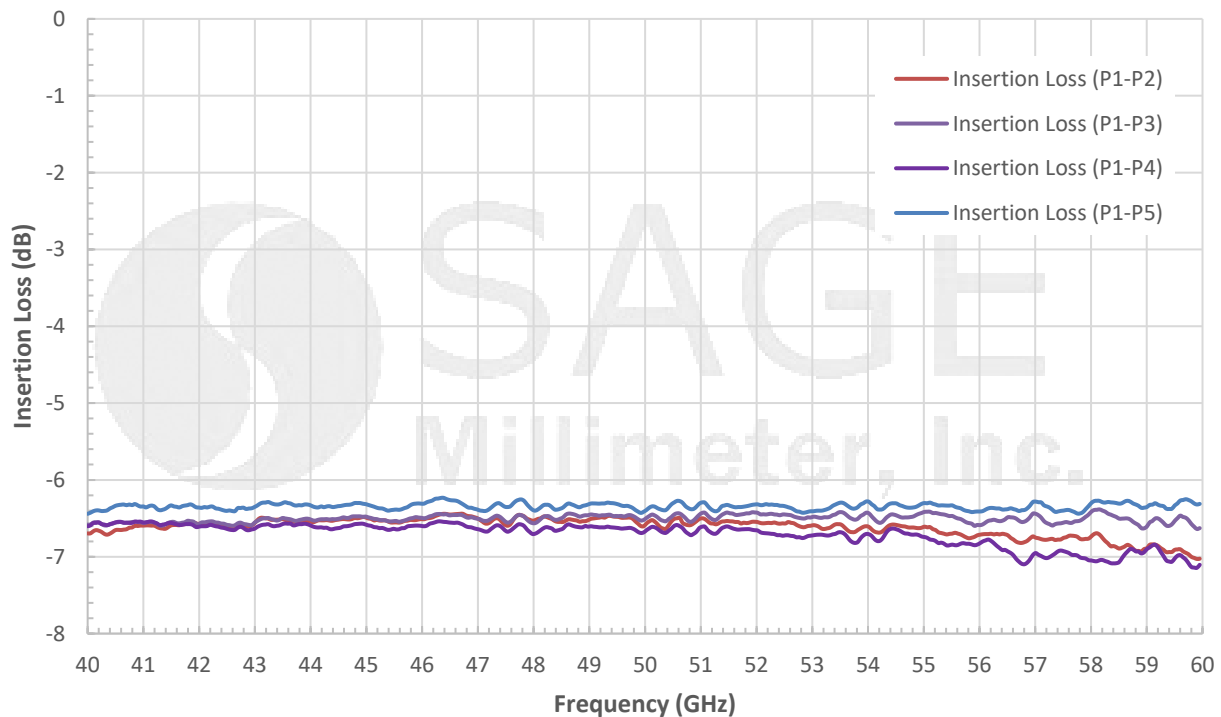
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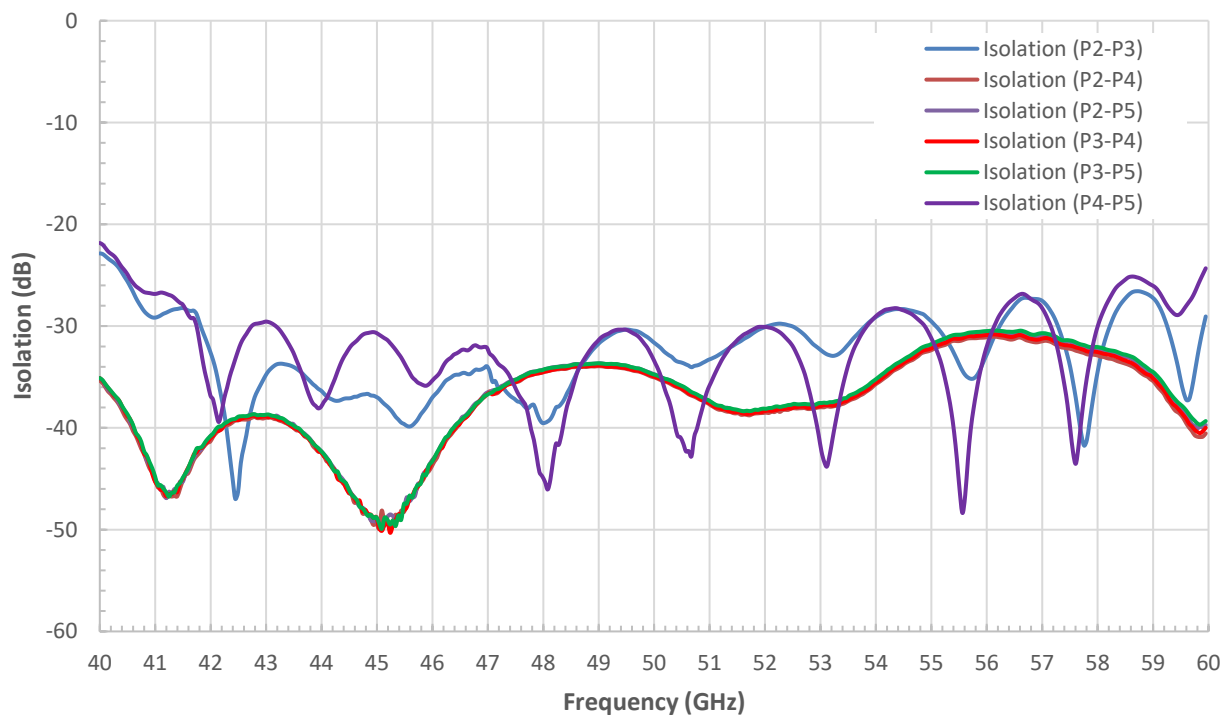
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Typical Measured Insertion Loss vs Frequency



Typical Measured Isolation vs Frequency

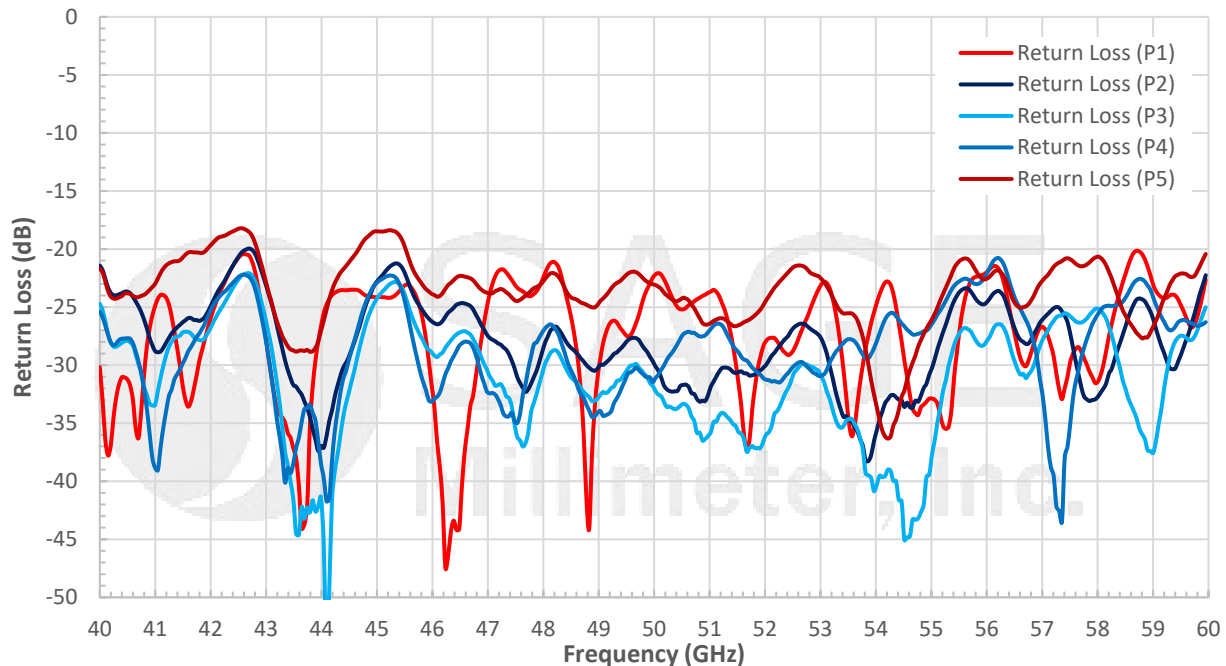


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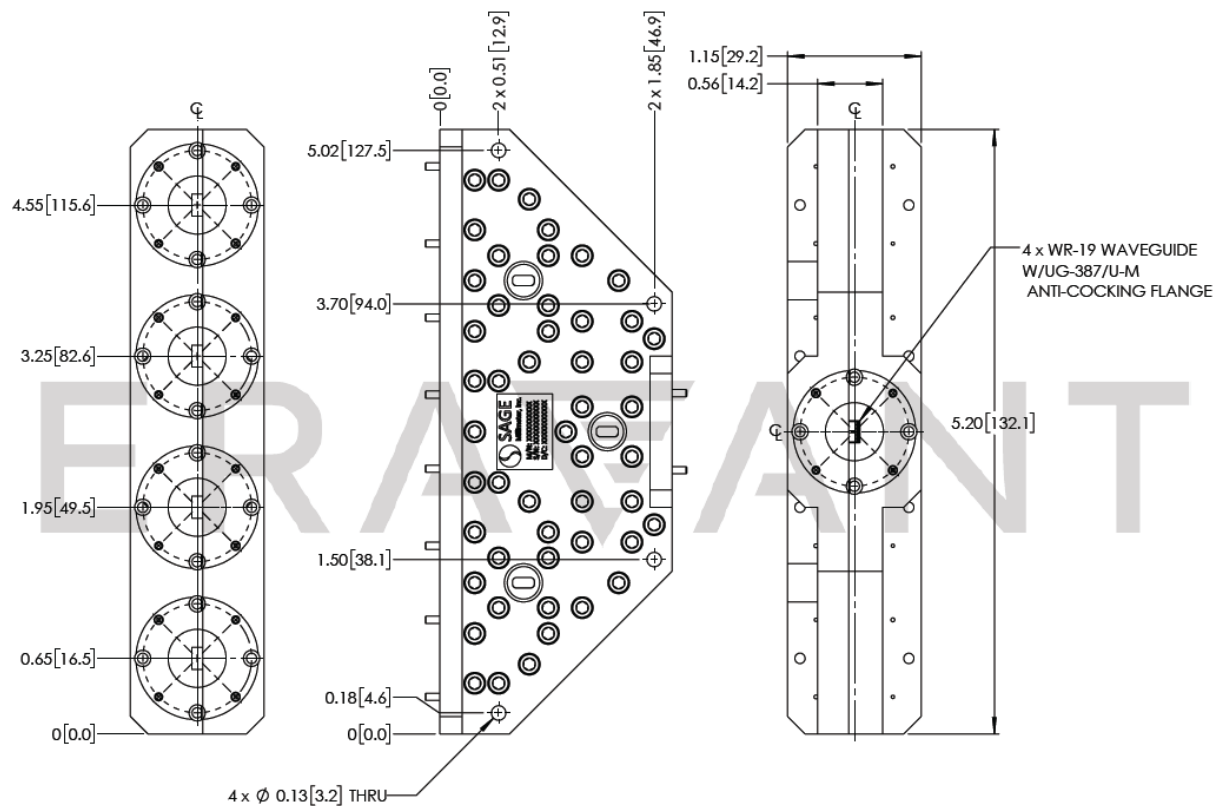
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Typical Measured Return Loss vs Frequency



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:

- Any foreign objects in the waveguide will degrade performance and/or damage the device.

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