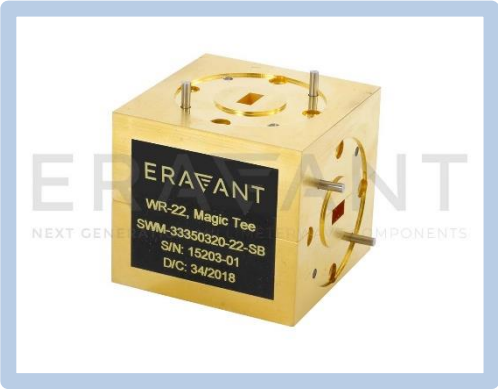
SWM-38350320-22-SB-WP

Rev 1.0

Q-Band Magic Tee, 38 to 50 GHz

Description:



Model SWM-38350320-22-SB-WP is a Q band magic tee that covers the frequency range of 38 to 50 GHz. This magic tee is a four-port hybrid coupler and/or power divider with two collinear arms, an E-plane (difference) arm, and an H-plane (sum) arm. The magic tee offers a 0.3 dB nominal insertion loss and high isolation between the two collinear arms and between the sum and difference arms. All waveguide ports have standard WR-22 waveguides with UG-383/U flanges.

Features:

- Low Insertion Loss
- High Isolation
- Compact Package

Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency		38 GHz		50 GHz
Insertion Loss			0.3 dB	
Isolation	Sum and Difference Ports		30 dB	
	Collinear Ports		20 dB	
Return Loss			12 dB	
Specification Temperature			+25°C	
Operating Temperature		-40°C		+85°C

Mechanical Specifications:

Item	Specification
Sum and Difference Ports	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Collinear Ports	WR-22 Waveguide with UG-383/U Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Weight	3.7 Oz
Outline	WM-BQ-A

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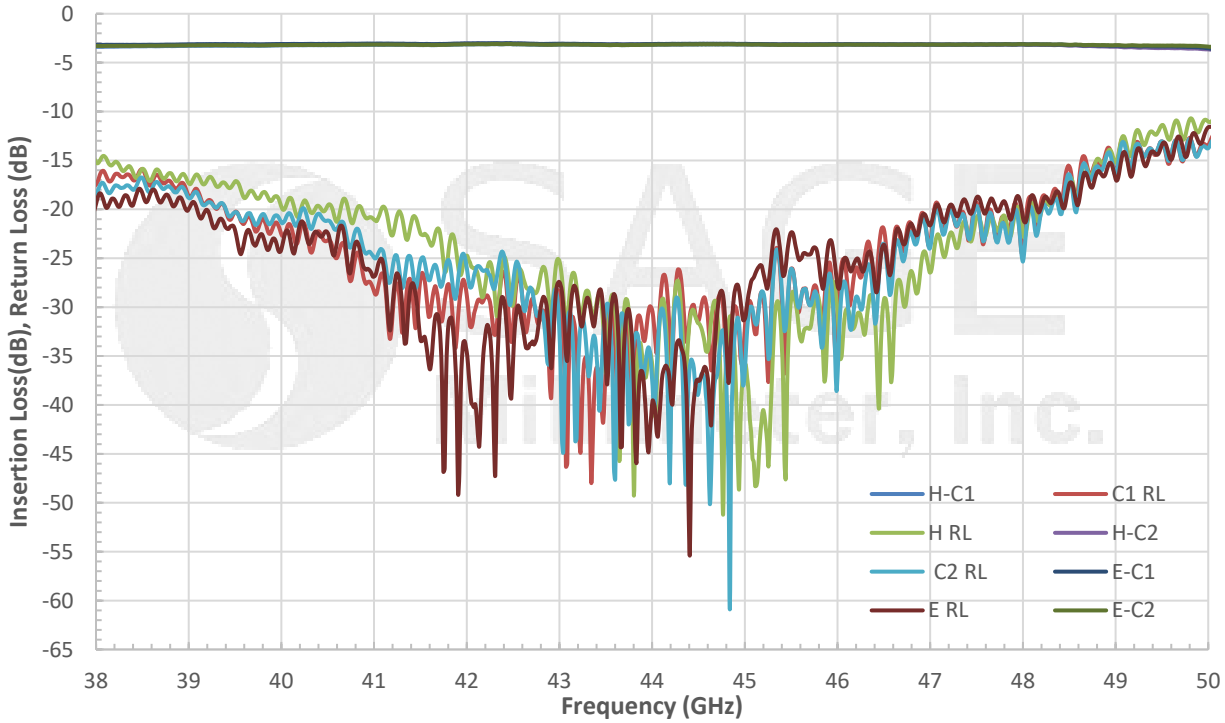
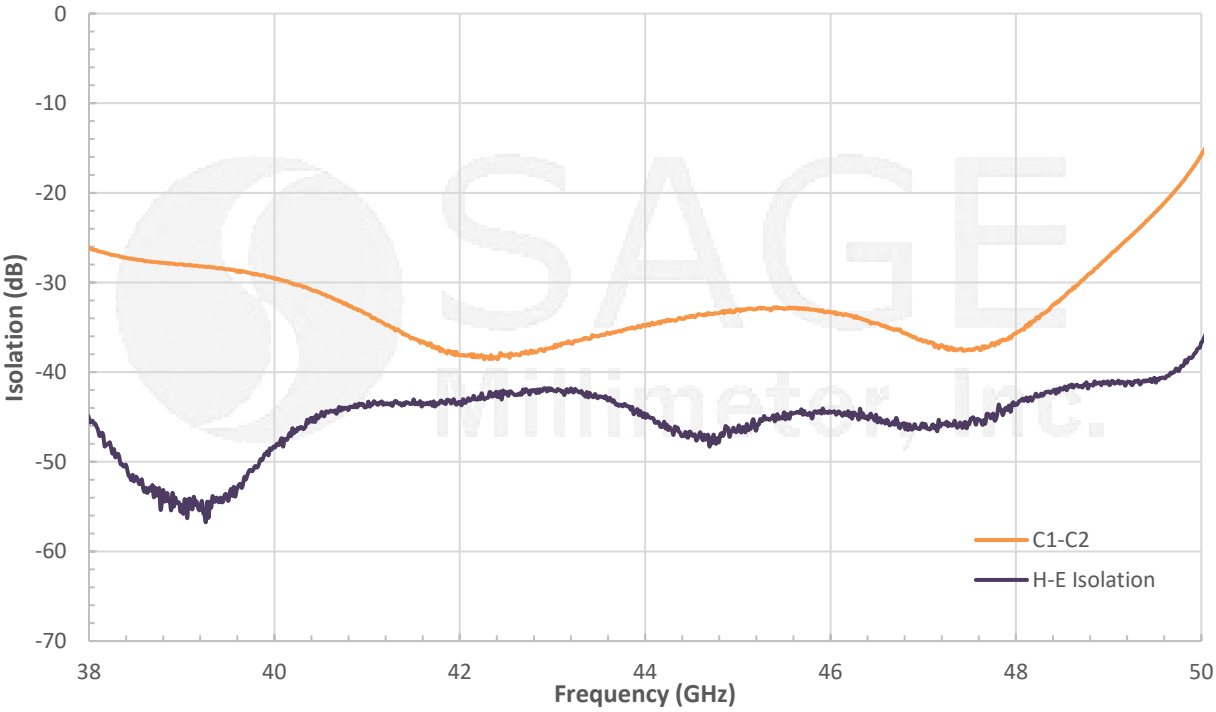
Q-Band Magic Tee, 38 to 50 GHz

Measured Insertion loss and Return Loss Vs Frequency



Measured Isolation Vs Frequency



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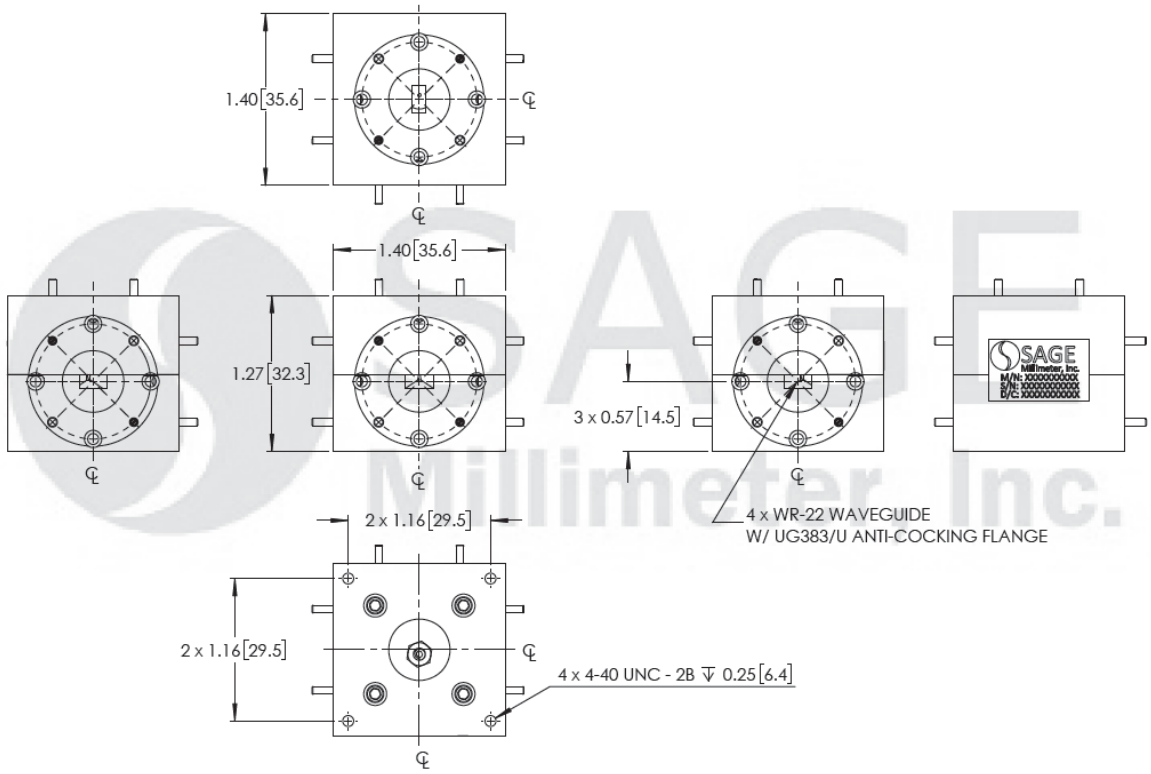
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- 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 shown will damage the device.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

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