

V-Band Magic Tee, 50 to 70 GHz

SWM-50370320-15-SB is a V band magic tee that covers the frequency range of 50 to 70 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-15 waveguides with UG-385/U anti-cocking flanges.



Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency Range		50 GHz		70 GHz
Insertion Loss			0.3 dB	
Isolation	Sum and Difference Ports		30 dB	
	Collinear Ports	15 dB	20 dB	
Return Loss			14 dB	
Specification Temperature			+25°C	
Operating Temperature		-40°C		+85°C

Mechanical Specifications:

Item	Specification
Sum and Difference Ports	WR-15 Waveguide with UG-385/U Anti-Cocking Flange
Collinear Port	WR-15 Waveguide with UG-385/U Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.00" (L) x 1.00" (W) x 0.87" (H)
Outline	WM-BV-A

ECCN

EAR99

FEATURES

- Low Insertion Loss
- High Isolation
- Compact Package

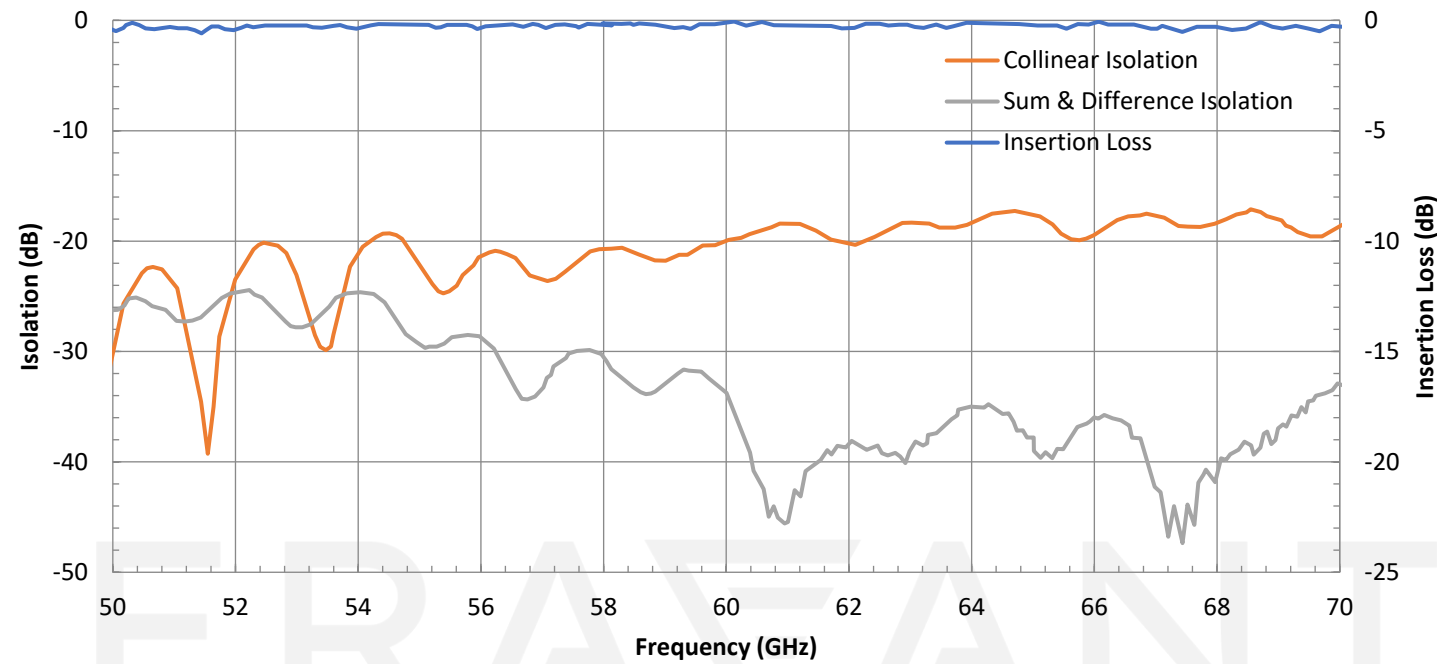
APPLICATIONS

- IEEE 802.ad WiGig Systems
- Test Labs
- Test Instrumentation
- Sub-assemblies

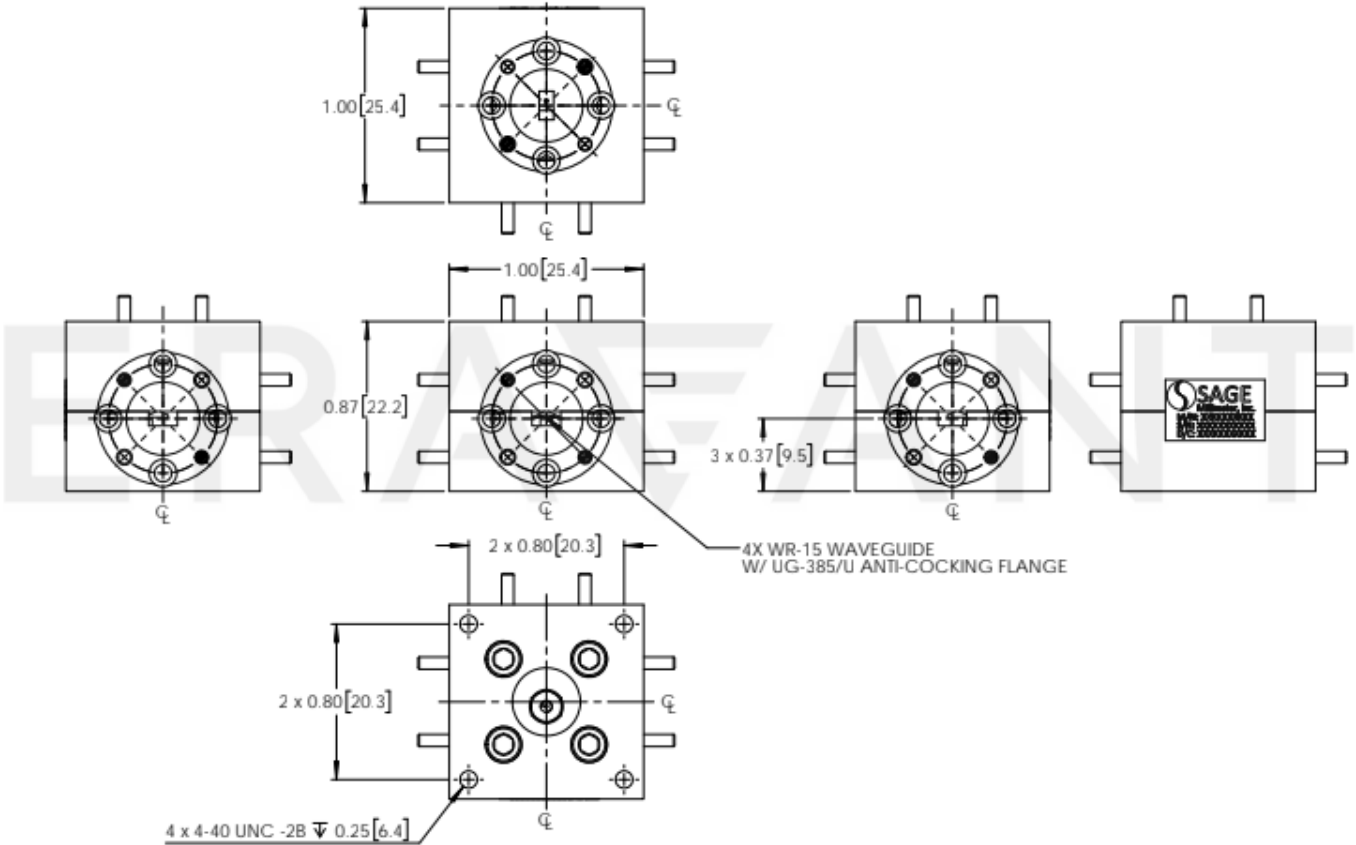
SUPPLEMENTAL DETAILS



Typical Isolation and Insertion Loss vs. Frequency



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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

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