

Ka-Band Magic Tee, 26.5 to 40 GHz

SWM-27340320-28-SB is a Ka-band magic tee that covers the frequency range of 26.5 to 40 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-28 waveguides with UG-599/U compatible flanges.



Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency Range		26.5 GHz		40 GHz
Insertion Loss			0.3 dB	
Power Unbalance			±0.3 dB	
Isolation	Sum and Difference Ports		30 dB	
	Collinear Ports		20 dB	
Return Loss			20 dB	
Specification Temperature			+25°C	
Operating Temperature		-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-28 Waveguide with UG-599/U Compatible Flange
Material	Brass
Finish	Gold Plated
Weight	3.7 Oz
Outline	WM-BA-A

ECCN

EAR99

FEATURES

- Full Band Performance from 26.5 to 40 GHz
- Low Insertion Loss
- High Isolation
- · Compact Package

APPLICATIONS

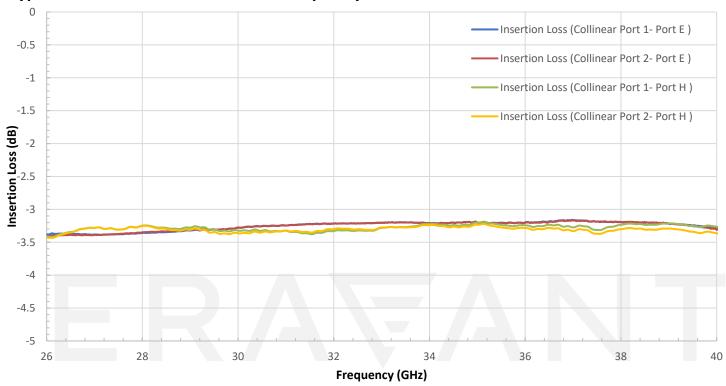
- Test Labs
- Test Instrumentation
- · Sub-assemblies

SUPPLEMENTAL DETAILS

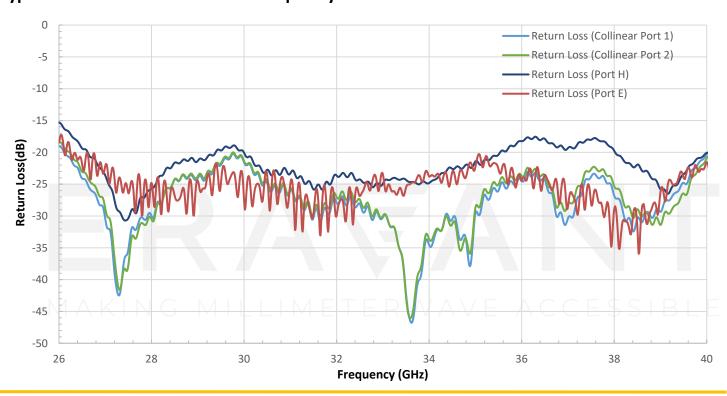




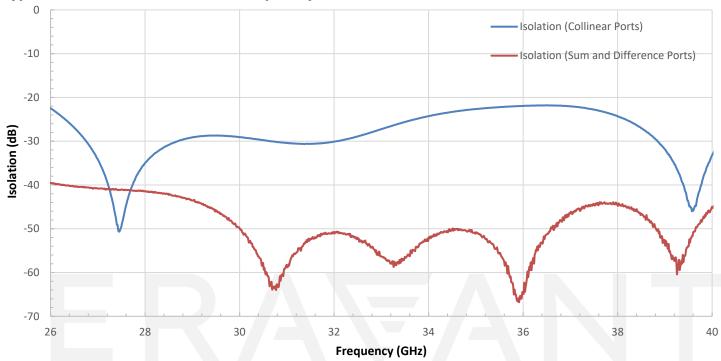
Typical Measured Insertion Loss Vs Frequency



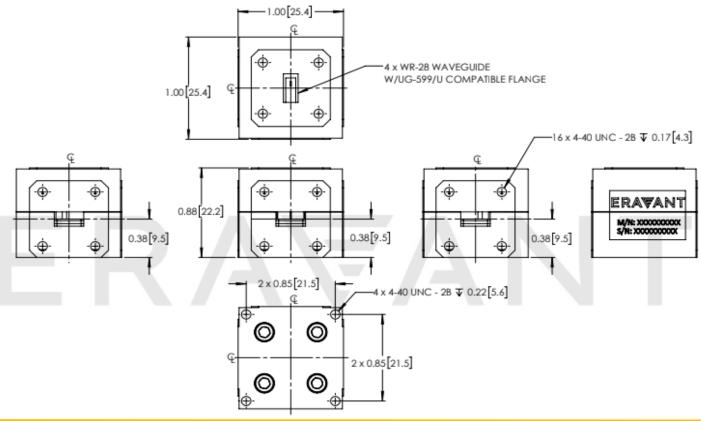
Typical Measured Return Loss Vs Frequency



Typical Measured Isolation 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:

- Exceeding absolute maximum ratings shown will damage the device.
- 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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