

SWM-90314420-08-SB

F-Band Magic Tee, 90 to 140 GHz

SWM-90314420-08-SB is an F-band magic tee that covers the frequency range of 90 to 140 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 1.0 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-08 waveguides with UG-387/U-M anti-cocking flanges.



Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency Range		90 GHz		140 GHz
Insertion Loss			1.0 dB	
Isolation	Sum and Difference Ports		30 dB	
	Collinear Ports		20 dB	
Return Loss			15 dB	
Specification Temperature			+25°C	
Operating Temperature		-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-08 Waveguide with UG-387/U-M Anti-Cocking Flanges
Material	Brass
Finish	Gold Plated
Weight	4.0 Oz
Outline	WM-BF-A

ECCN

EAR99

FEATURES

- Low Insertion Loss
- High Isolation
- Compact Package

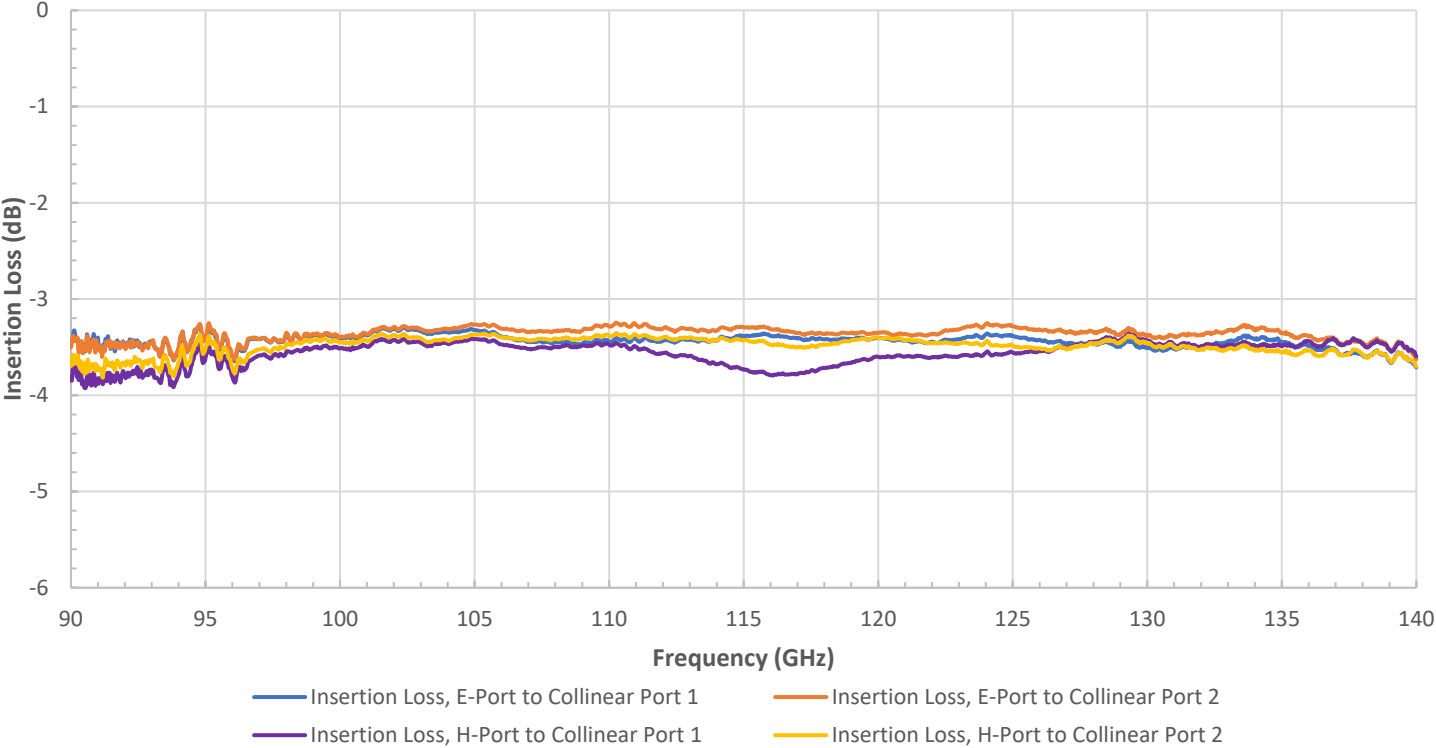
APPLICATIONS

- Test Labs
- Test Instrumentation
- Sub-assemblies

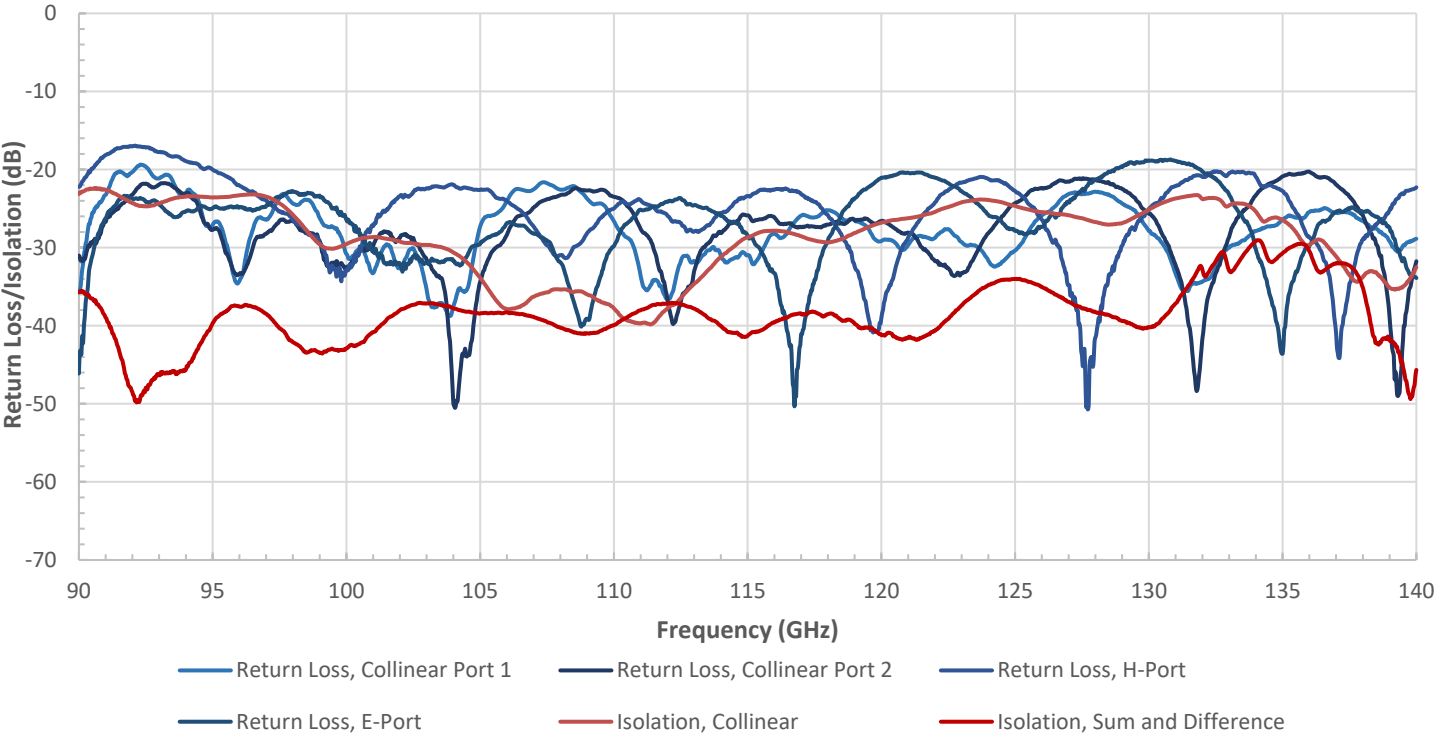
SUPPLEMENTAL DETAILS



Typical Measured Insertion Loss vs Frequency

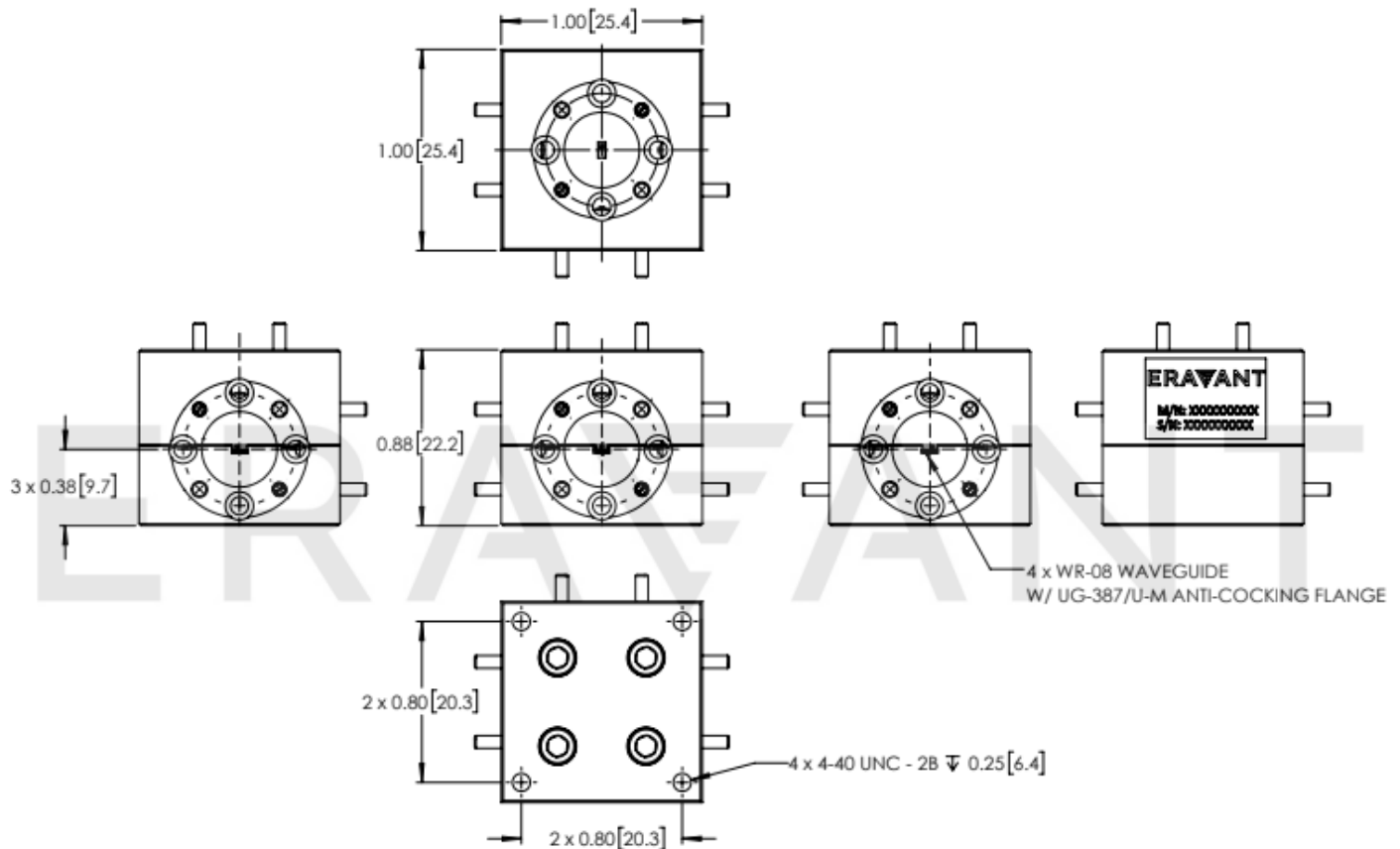


Typical Measured Return Loss and Isolation vs Frequency



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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.