

## SWX-31339315-28-4B

### Waveguide Crossguide Coupler, Ka Band, 15 dB

**SWX-31339315-28-4B** is a four-port, split block crossguide coupler that is offered for power sampling where directivity is of concern. Compared to a multi-hole directional coupler, crossguide couplers offer lower insertion loss and a smaller form factor and insertion length. This model operates between 31 to 39 GHz with a 15 dB typical coupling level, 0.5 dB nominal insertion loss, and 15 dB typical directivity. The input, output, and coupled ports are all WR-28 waveguides with UG-599/U compatible flanges.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	31 GHz		39 GHz
Insertion Loss*		0.5 dB	
Coupling		15 dB	
Directivity		15 dB	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

\*Performance may be reduced at band edges.

#### Mechanical Specifications:

Item	Specification
Waveguide Ports	WR-28 Waveguide with UG-599/U Compatible Flange
Material	Aluminum
Finish	Gold Plated
Weight	1 Oz
Outline	WX-BA-4-A

#### ECCN

EAR99

#### FEATURES

- Low Insertion Loss
- Moderate Directivity
- Four Port Configuration

#### APPLICATIONS

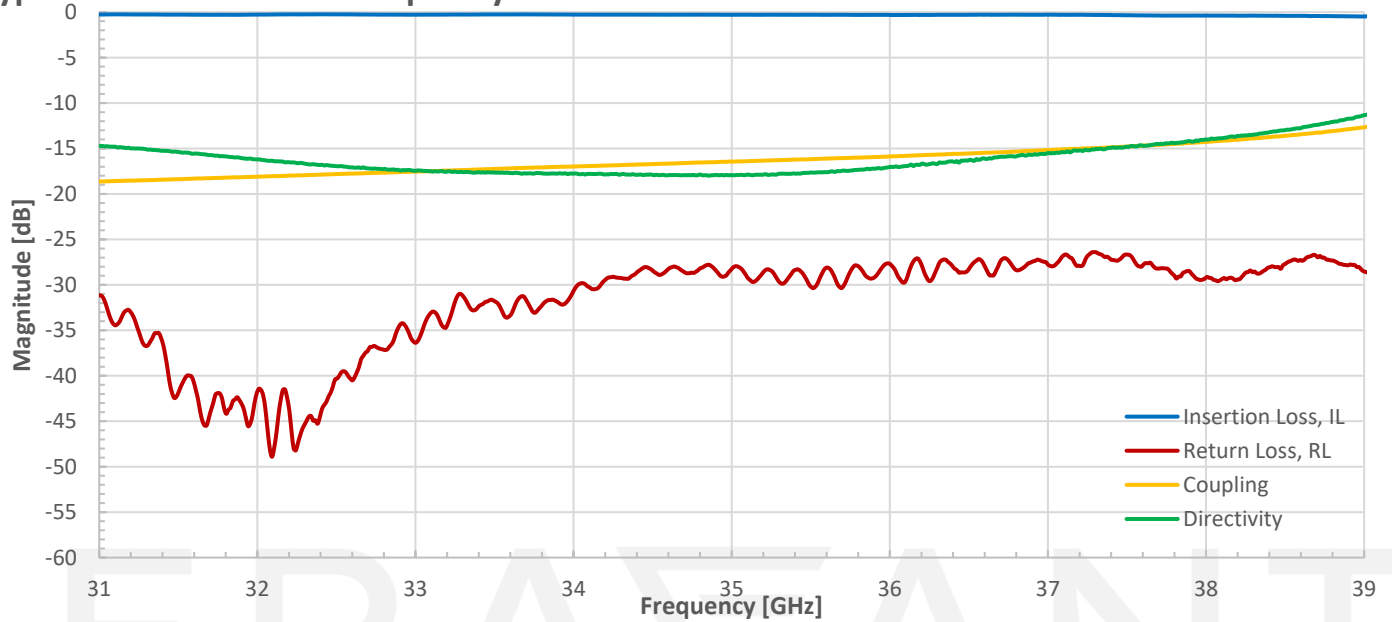
- Test Labs
- Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS



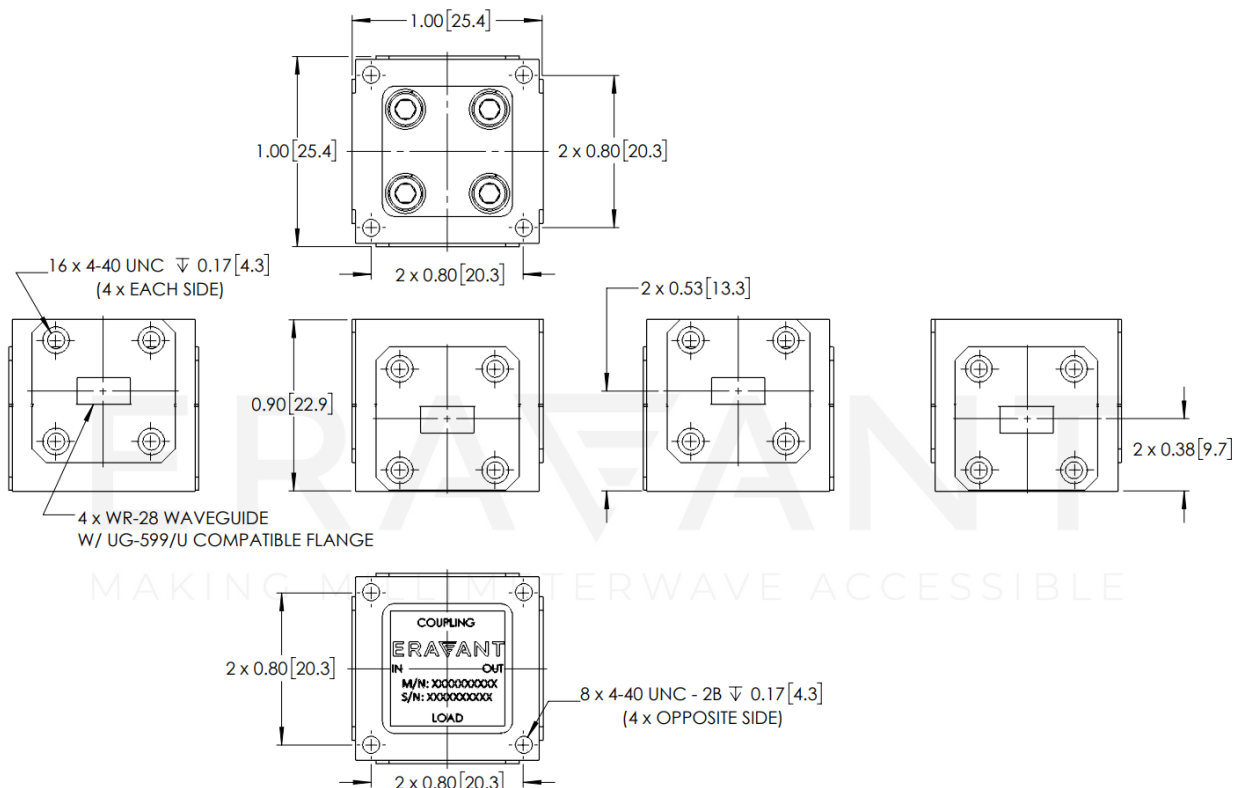
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### Typical Performance Vs Frequency



### 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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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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