

SWZ-28302315-28-SB

26.5 to 28.5 GHz Short Slot 90 Degree Hybrid Coupler, WR-28

SWZ-28302315-28-SB is a Ka band, short slot 90 degree hybrid coupler that delivers a 3 dB nominal coupling level and 20 dB typical isolation from 26.5 to 28.5 GHz. The interfaces of the coupler are WR-28 waveguides with UG-599/U-M compatible flanges.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz		28.5 GHz
Insertion Loss**		0.5 dB	
Coupling*		3 dB	
Isolation	15 dB	20 dB	
Phase Difference between Through and Coupling Ports		90°	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

**Insertion loss specification does not include loss due to coupling. However, plotted data includes coupling loss.

*The definition of the insertion loss, coupling, amplitude imbalance and phase imbalance is shown below:

ECCN

EAR99

FEATURES

- ±1 GHz Bandwidth
- Low Insertion Loss

APPLICATIONS

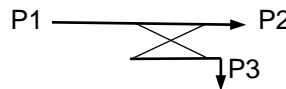
- Testing & Measurement
- Instrumentation
- Sub-assemblies

$$\text{Insertion Loss} = -10 \log_{10} [(P2+P3)/P1]$$

$$\text{Coupling Value} = -10 \log_{10} [P3/P1]$$

$$\text{Amplitude Imbalance} = -10 \log_{10} [P3/P2]$$

$$\text{Phase Imbalance} = \angle[P3/P1] - \angle[P2/P1]$$

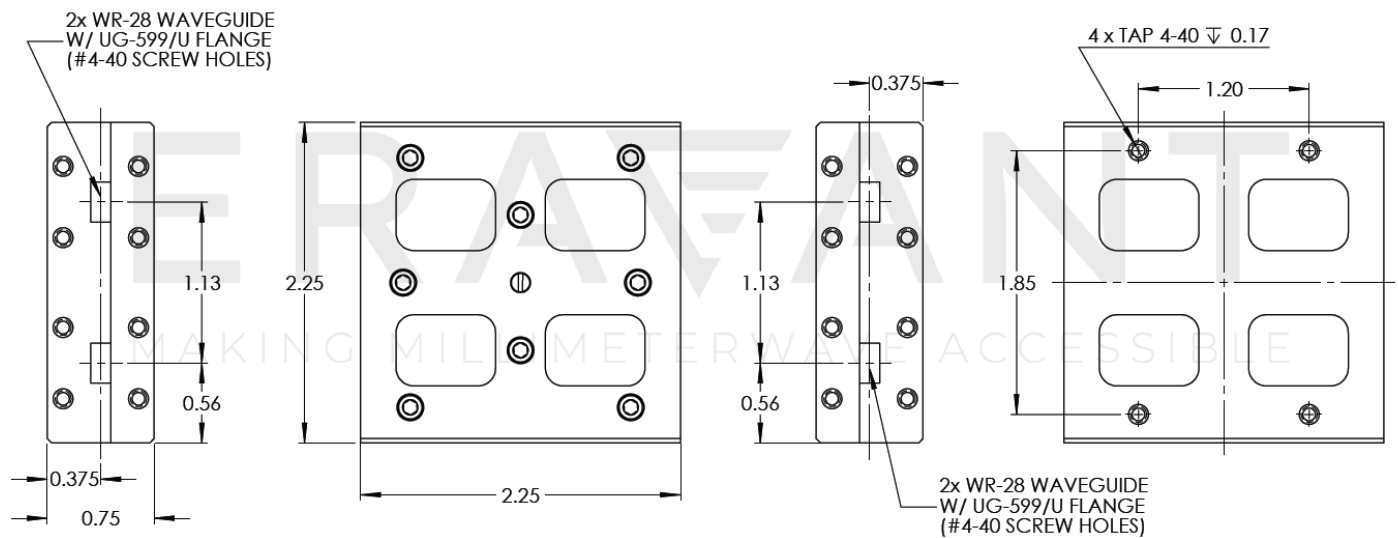


SWZ-28302315-28-SB

Mechanical Specifications:

Item	Specification
RF Ports	WR- 28 Waveguide
Flange	UG-599/U-M Compatible Flange
Material	Aluminum
Finish	Gold Plated
Weight	5 Oz
Outline	WZ-AB

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:

- Any foreign objects in the waveguide will degrade performance and/or damage the device.