

## SWX-18327320-42-4B

### Waveguide Crossguide Coupler, WR-42, 20 dB

**SWX-18327320-42-4B** is a four-port, split block cross guide coupler that is offered for power sampling where directivity is of concern. Compared to a traditional multi-hole directional coupler, cross guide couplers offer lower insertion loss and a smaller form factor package. This model operates between 18 to 26.5 GHz with 20 dB typical coupling, 0.4 dB nominal insertion loss, and 20 dB typical directivity. The input, output, and coupled ports are all WR-42 waveguides with UG-595/U compatible flanges.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		26.5 GHz
Insertion Loss*		0.4 dB	
Coupling		20 dB	
Directivity		20 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-42 Waveguide with UG-595/U Compatible Flange
Material	Aluminum
Finish	Gold Plated
Weight	3.7 Oz
Outline	WX-BK-4-F3-A

#### ECCN

EAR99

#### FEATURES

- Full Band Operation
- Low Insertion Loss
- Moderate Directivity
- Four Port Configuration

#### APPLICATIONS

- Test Labs
- Instrumentations
- Sub-assemblies

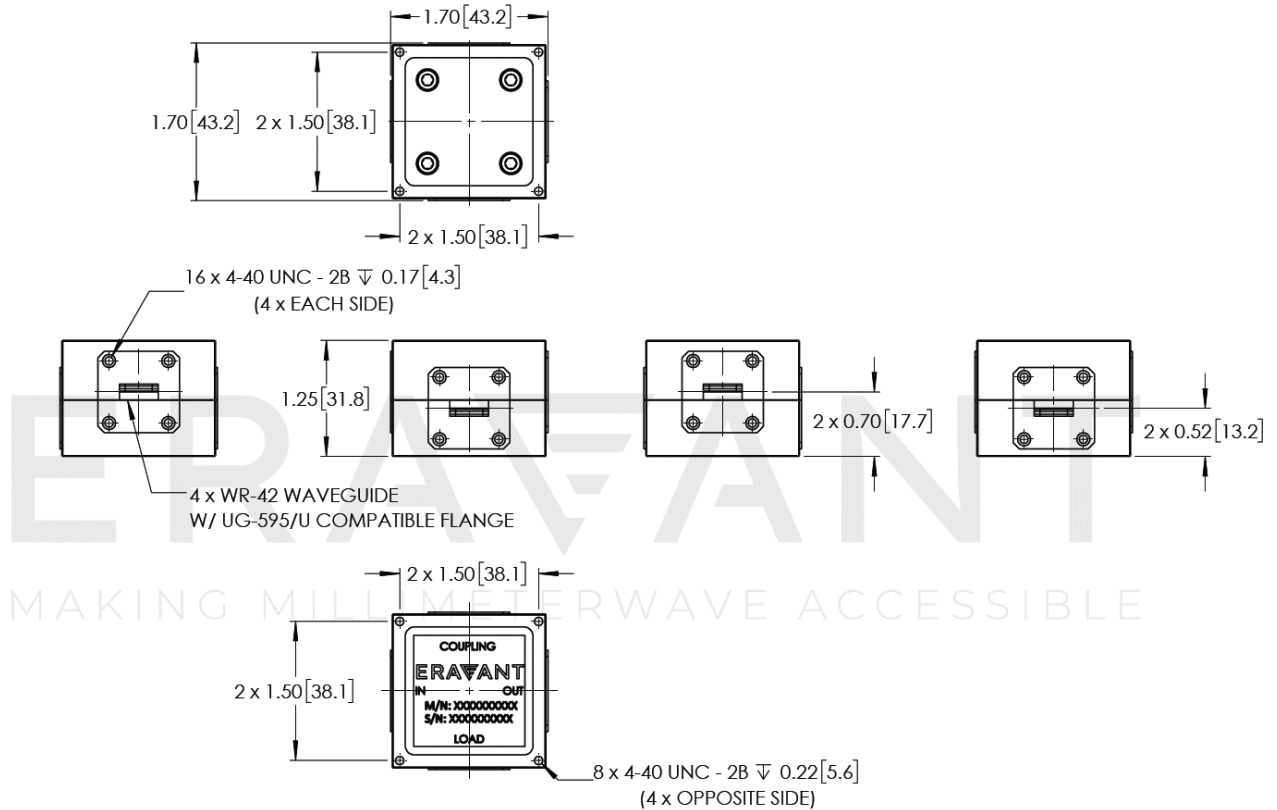
#### SUPPLEMENTAL DETAILS



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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.
- 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.