

E-Band Waveguide Dual-Directional Coupler, 6 dB

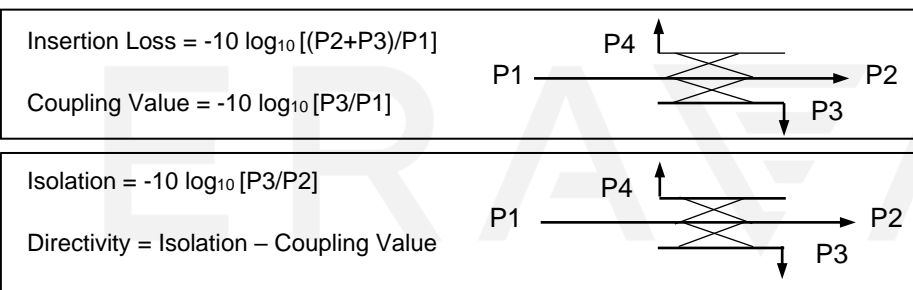
SWD-0640H-12-DB is an E band, four-port waveguide dual-directional coupler that delivers a 6 dB nominal coupling level and 40 dB typical directivity across the full waveguide band from 60 to 90 GHz. The dual-directional coupler uses a traditional multi-hole and split block design to achieve a flat coupling level, high directivity, and low insertion loss. The interfaces of the coupler are WR-12 waveguides with UG-387/U anti-cocking flanges. Custom coupling levels are available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Insertion Loss*		1.5 dB	
Coupling*		6.0 dB	
Directivity*	30 dB	40 dB	
VSWR		1.1:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

*The definition of the insertion loss, coupling and directivity is show as following. The required termination on the waveguide port is 30 dB or better for accurate measurement.



ECCN

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FEATURES

- Full Band Operation
- Low Insertion Loss
- High Directivity

APPLICATIONS

- Test Labs
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

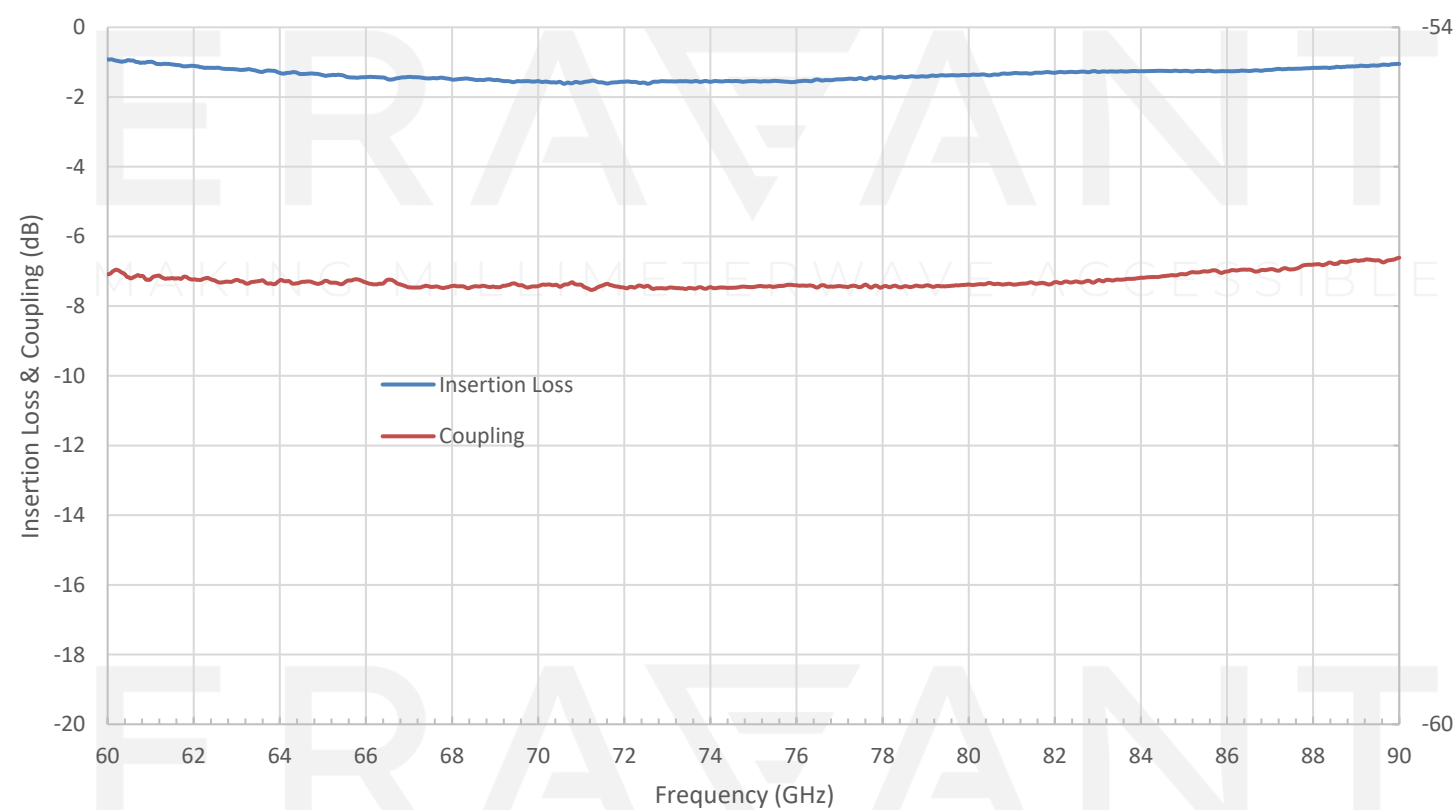


SWD-0640H-12-DB

Mechanical Specifications:

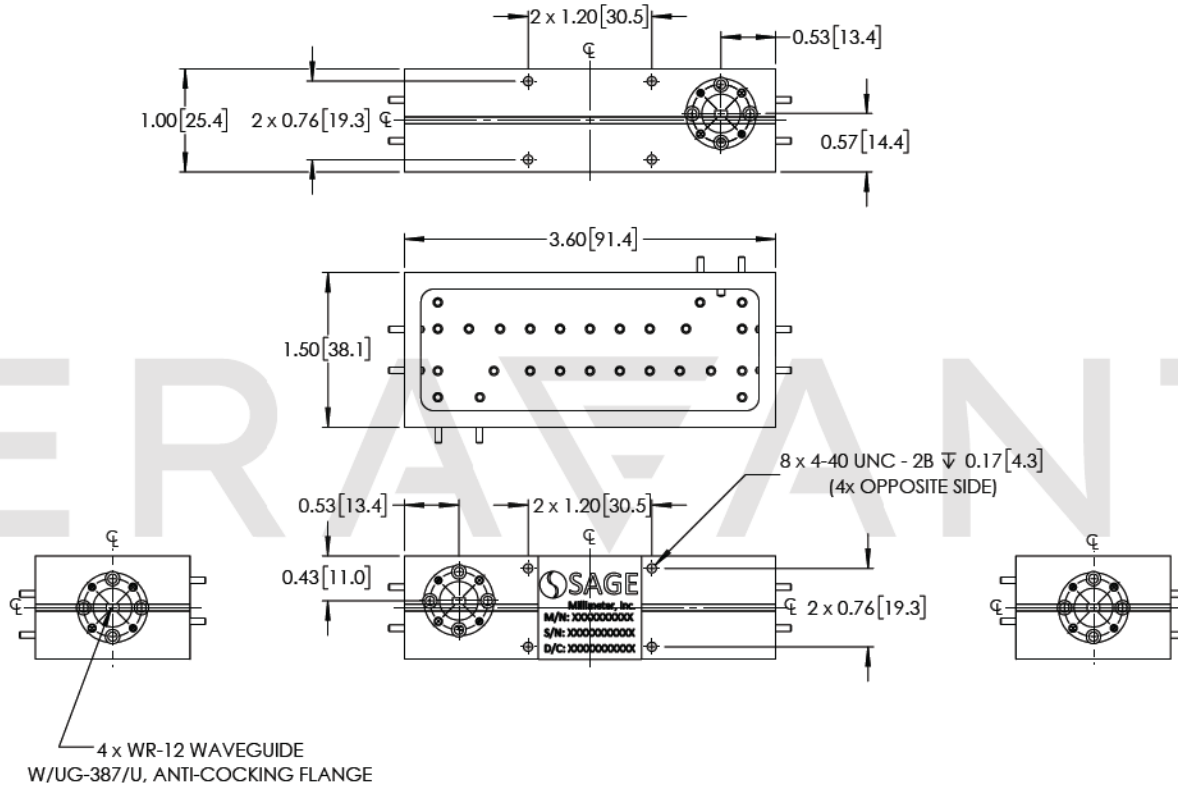
Item	Specification
Through Ports	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Coupled Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Housing Material	Brass
Finish	Gold Plated
Size	3.60" (L) X 1.50" (W) x 1.00" (H)
Outline	WD-DB-E-A

Typical Performance vs. Frequency



SWD-0640H-12-DB

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.

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