# SWP-85311402-10-S1-WP

Rev 1.0

## 2-Way Waveguide Power Divider, 85 to 110 GHz

### Description:

**Model SWP-85311402-10-S1-WP** is a W-band, 2-way waveguide power divider with a typical insertion loss of 0.8 dB across the frequency range of 85 to 110 GHz. The power divider offers 15 dB isolation and well-balanced ports, which can be used for in-phase power dividing or combining. This model comes as a right-angle configuration with WR-10 waveguides and UG-387/U-M anti-cocking flanges at the input and output ports.


### Features:

- Low Insertion Loss
- High Isolation
- Compact Package

### Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies

### Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|---|---|---|---|
| Frequency | 85 GHz | | 110 GHz |
| Power Unbalance | | ±0.3 dB | |
| Insertion Loss | | 0.8 dB | |
| Isolation | | 15 dB | |
| Input and Output Return Loss | | 10 dB | |
| Specification Temperature | | +25 ˚C | |
| Operating Temperature | -40 ˚C | | +85 ˚C |

### Mechanical Specifications:

| Item | Specification |
|---|---|
| Waveguide Ports | WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange |
| Material | Aluminum |
| Finish | Gold Plated |
| Weight | 1.3 Oz |
| Outline | WP-W2-A |


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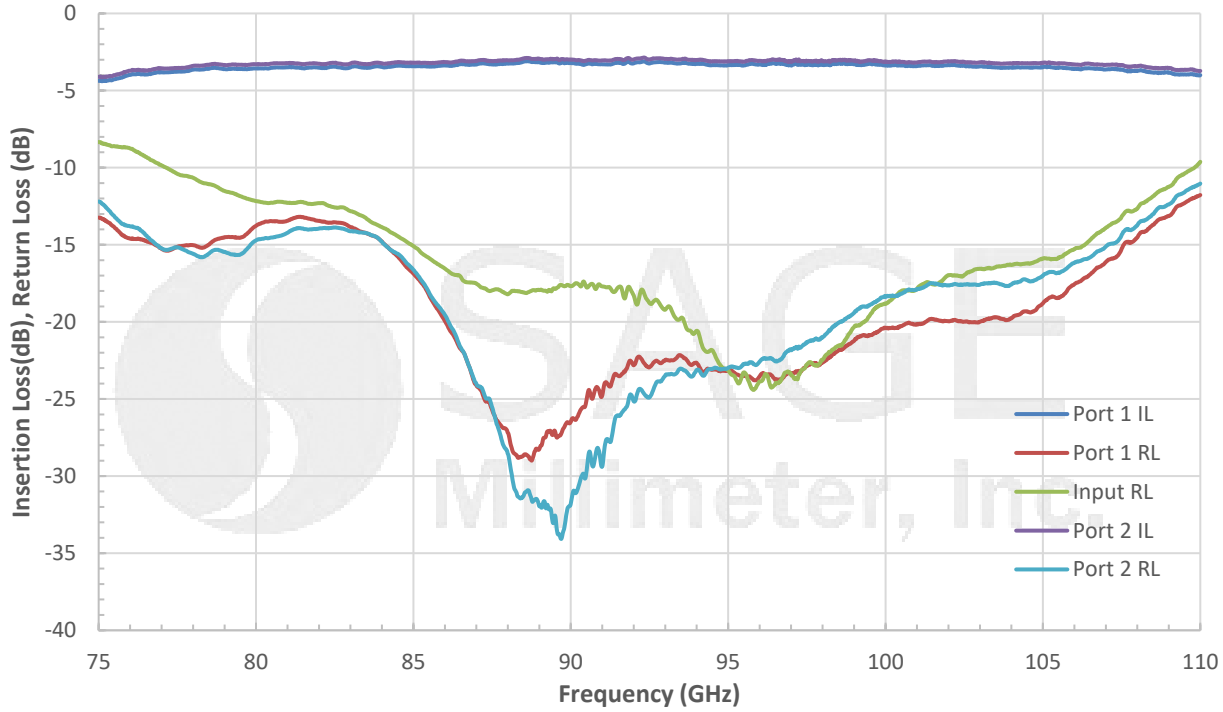
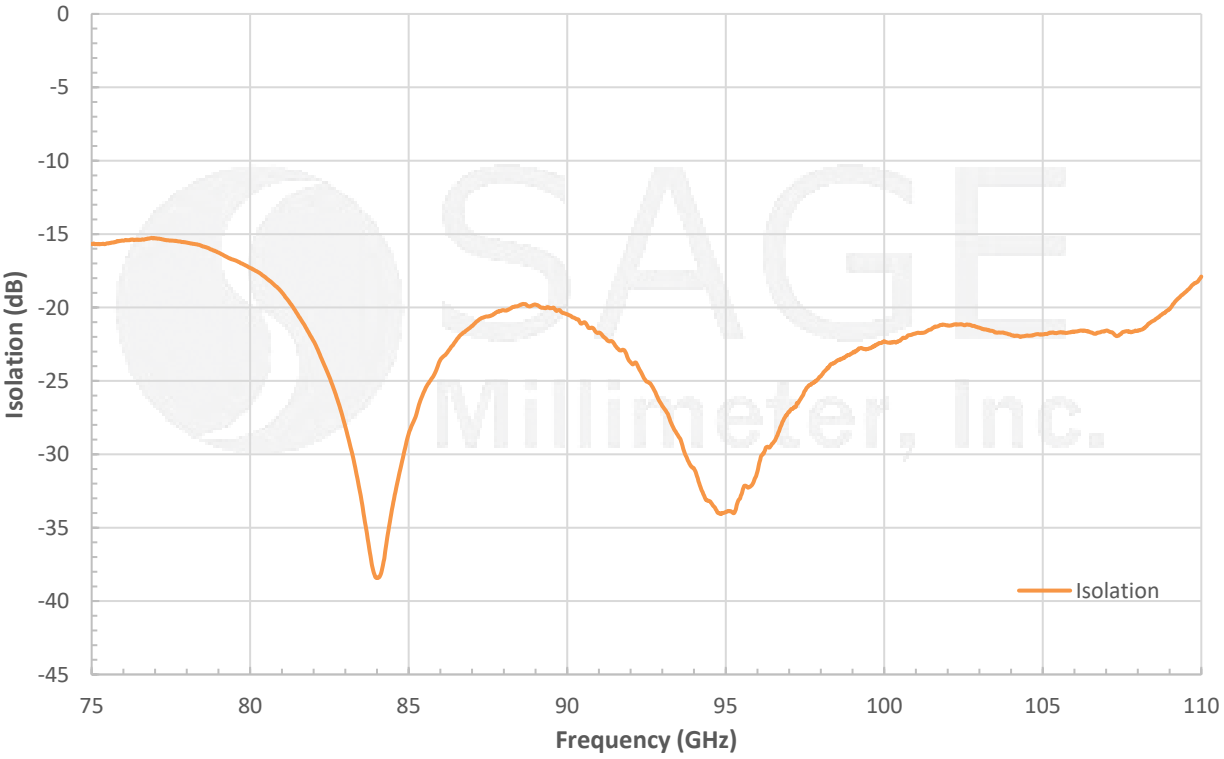
## 2-Way Waveguide Power Divider, 85 to 110 GHz

### Measured Insertion loss and Return Loss Vs Frequency




### Measured Isolation Vs Frequency

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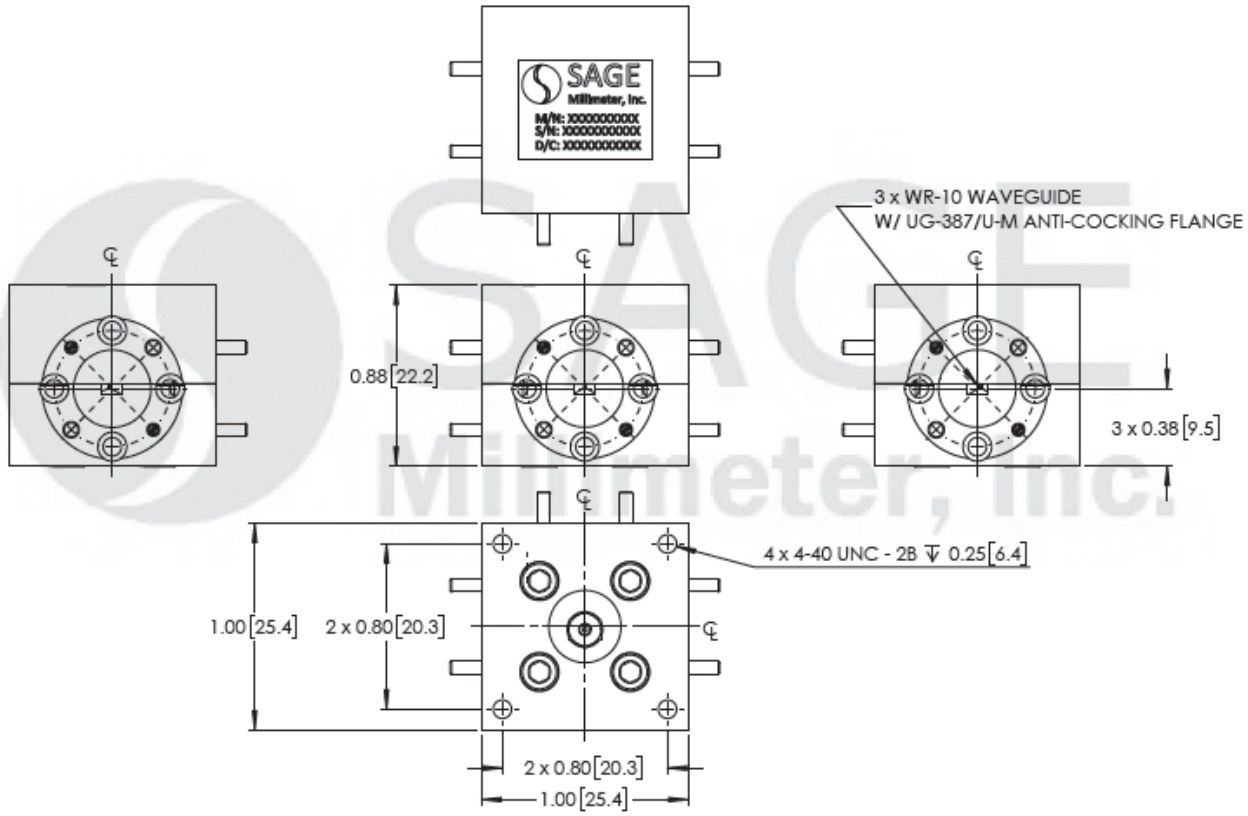
## 2-Way Waveguide Power Divider, 85 to 110 GHz

**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])




**Note:**

- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25 ˚C case temperature.
- 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.

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