

# 4-Way Waveguide Power Divider, 71 to 86 GHz

### **Description:**

Model SWP-71386304-12-E1 is an E band, 4-way power divider with a typical insertion loss of 0.8 dB across the frequency range of 71 to 86 GHz. The divider offers 25 dB isolation and well-balanced ports, which can be used for in-phase power dividing or combining. This power divider comes as an in-line configuration with WR-12 waveguides and UG-387/U Anti-cocking flanges at the input and all outputs.



#### **Features:**

- Low Insertion Loss
- High Isolation
- Inline Configuration

### **Applications:**

- Test Labs
- Test Instrumentation
- Sub-assemblies

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		86 GHz
Insertion Loss		0.8 dB	1.0 dB
Power Unbalance		±0.4 dB	±0.5 dB
Isolation (Adjacent Ports)		15 dB	
Isolation (Non-adjacent Ports)		25 dB	
Input/ Output Return Loss		1.2:1	1.5:1
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

## **Mechanical Specifications:**

Item	Specification
Input Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Output Port	WR-12 Waveguide with UG-387/U Anti-Cocking Flange
Material	Aluminum
Finish	Gold Plated
Weight	3.6 Oz
Dimensions	4.30" (W) x 1.30" (L) x 0.75" (H)
Port Separations	1.35" and 0.80"
Outline	WP-E4I-A

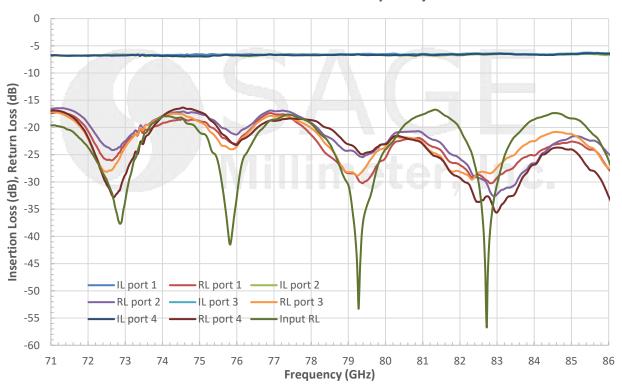


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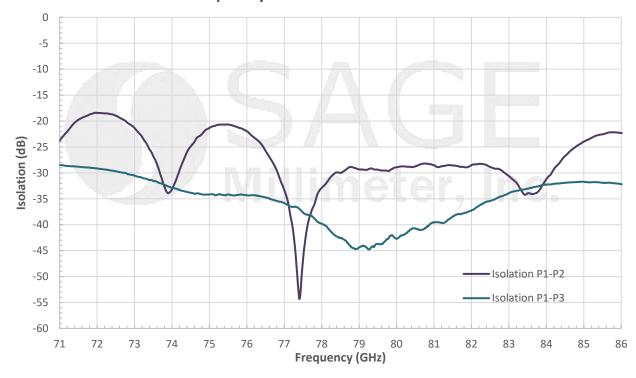
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## **Measured Insertion Loss and Return Loss Vs Frequency**



### **Measured Isolation Vs Frequency**



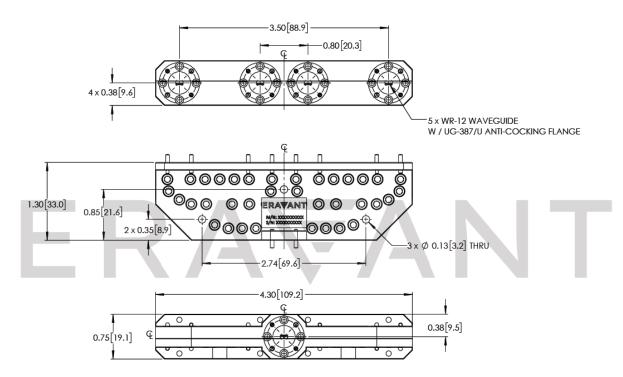


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**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches)



#### 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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