

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

### **Description:**

Model SWP-71386304-12-S2 is an E band, 4-way power divider with a typical insertion loss of 1.0 dB across the frequency range of 71 to 86 GHz. The divider offers 20 dB isolation and well balanced ports, which can be used for in-phase power dividing or combining. This power divider comes as a right angle configuration with WR-12 waveguides and UG-387/U flanges at the input and all outputs.



#### **Features:**

- Low Insertion Loss
- Excellent Port Unbalance
- High Isolation

## **Applications:**

- Test Labs
- Instrumentation
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		86 GHz
Power Unbalance			±0.4 dB
Insertion Loss		1.0 dB	
Isolation (Adjacent Ports)	15 dB	20 dB	
Isolation (Non-Adjacent Ports)		25 dB	
Input/ Output Return Loss		14 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

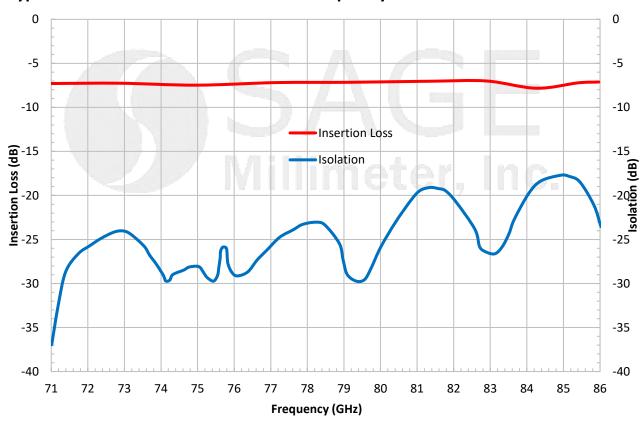
Item	Specification	
Input Port	WR-12 Waveguide with UG-387/U Flange	
Output Port	WR-12 Waveguide with UG-387/U Flange	
Material	Aluminum	
Finish	Gold Plated	
Weight	4.5 Oz	
Dimensions	1.50" (L) X 2.00" (W) X 1.00" (H)	
Outline	WP-E4	



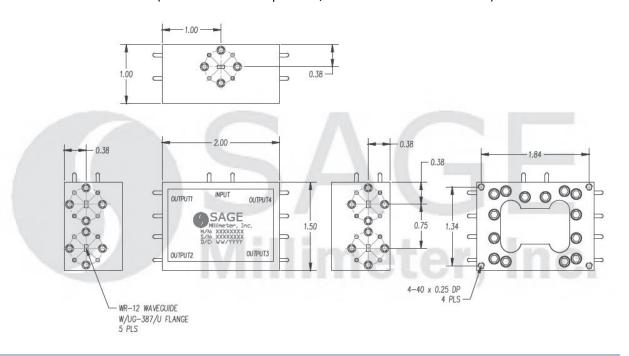
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### Typical Insertion Loss and Isolation vs. Frequency



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





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#### 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.
- SAGE Millimeter, Inc. 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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