

# In-line Waveguide Power Divider, 71 to 86 GHz, 2 Way

### **Description:**

Model SWP-71386302-12-E1 is an E band, 2-way in-line waveguide power divider that operates across the frequency range of 71 to 86 GHz. The power divider offers a typical insertion loss of 0.8 dB at each output port and a typical isolation of 18 dB. The ports are well balanced and in phase for either power dividing or power combining applications across the full band. This model offers an end launch design with WR-12 waveguides and UG-387/U flanges. Other configurations are available under different model numbers.



#### **Features:**

- Low Insertion Loss
- High Isolation
- Compact Package
- In-line Configuration

## **Applications:**

- Test Labs
- Test Instrumentation
- Sub-assemblies

### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency	71 GHz		86 GHz
Power Unbalance		± 0.3 dB	± 0.5 dB
Insertion Loss		0.8 dB	
Port Isolation		18 dB	
Input /Output VSWR			1.5:1
Specification Temperature		+25°C	1 9
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

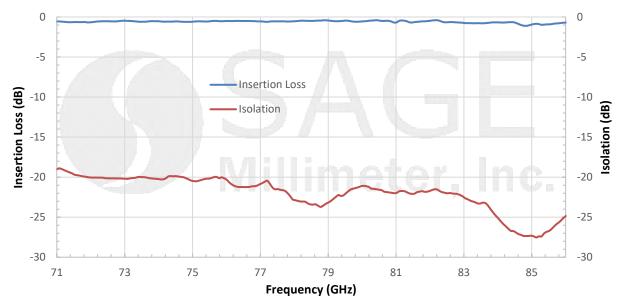
Item	Specifications	
Input	WR-12 Waveguide with UG-387/U Flange	
Outputs	WR-12 Waveguide with UG-387/U Flange	
Size	1.75" (L) X 1.00" (W) X 0.75" (H)	
Housing Material	Aluminum	
Finish	Gold Plated	
Weight	1.2 Oz	
Outline	WP-E2I	



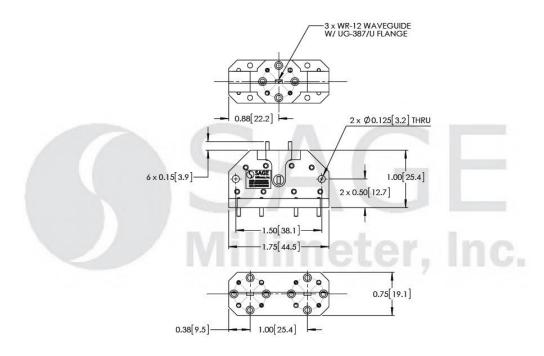
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### Typical Insertion Loss and Isolation vs. Frequency



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



#### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### Caution:

 Any foreign object in the waveguide will cause performance degradation and may damage the device.



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