

# Waveguide Crossguide Coupler, U Band, 30 dB

### **Description:**

Model SWX-40348330-19-4B is a four-port, split block crossguide coupler that is offered for power sampling where directivity is of concern. Compared to a multi-hole directional coupler, crossguide couplers offer lower insertion loss and a smaller form factor and insertion length. This model operates between 40 to 48 GHz with a 30 dB typical coupling level, 0.5 dB nominal insertion loss, and 15 dB typical directivity. The input, output, and coupled ports are all WR-19 waveguides with UG-383/U-M flanges.



#### **Features:**

- Low Insertion Loss
- **Moderate Directivity**
- **Four Port Configuration**

### **Applications:**

- **Test Labs**
- **Test Instrumentation**
- Sub-assemblies

## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	40 GHz		48 GHz
Coupling Level		30.0 dB	
Insertion Loss		0.5 dB	
Directivity		15.0 dB	
Input/Output VSWR		1.1:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## **Mechanical Specifications:**

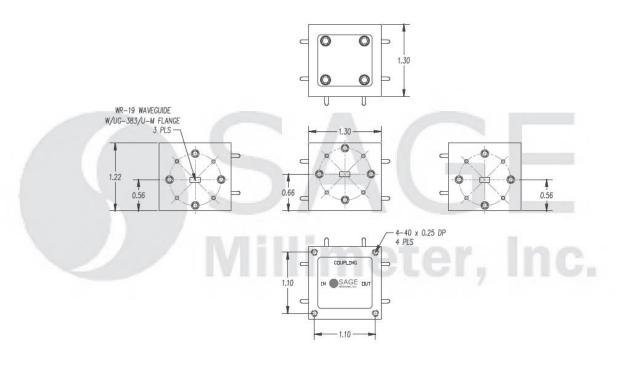
Mechanical Specifications:			
Item	Specifications		
Input	WR-19 Waveguide with UG-383/U-M Flange		
Output	WR-19 Waveguide with UG-383/U-M Flange		
Coupled	WR-19 Waveguide with UG-383/U-M Flange		
Size	1.30" (L) x 1.30" (W) x 1.22" (H)		
Material	Aluminum		
Finish	Gold Plated		
Weight	2.0 Oz		
Outline	WX-BU-4		



www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com



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



#### Note:

- All data was presented using a limited 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 objects in the waveguide will degrade performance and/or damage the device.



RoHS

www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com