

# Waveguide Crossguide Coupler, V Band, 20 dB

### **Description:**

**Model SWX-50375320-15-4B** 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 50 to 75 GHz with a 20 dB typical coupling level, 0.7 dB nominal insertion loss, and 20 dB typical directivity. The input, output, and coupled ports are all WR-15 waveguides with UG-385/U 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	50 GHz		75 GHz
Coupling Level		20.0 dB	
Insertion Loss		0.7 dB	
Directivity		20.0 dB	
Input/Output VSWR		1.1:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

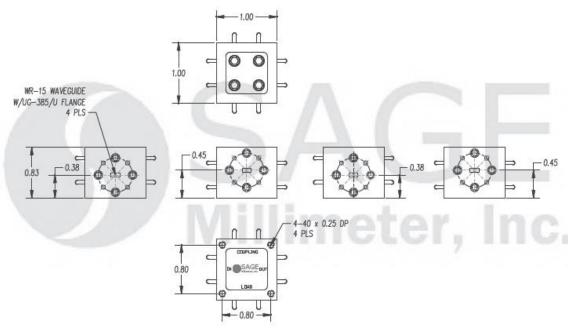
Item	Specifications
Input	WR-15 Waveguide with UG-385/U Flange
Output	WR-15 Waveguide with UG-385/U Flange
Coupled	WR-15 Waveguide with UG-385/U Flange
Size	1.00" (L) x 1.00" (W) x 0.83" (H)
Material	Aluminum
Finish	Gold Plated
Weight	0.8 Oz
Outline	WX-BV-4



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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

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