# SWX-35345330-22-4B Rev. 1.0

Waveguide Crossguide Coupler, Q Band, 30 dB

Description:

Model SWX-35345330-22-4B 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 35 to 45 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-22 waveguides with UG-383/U flanges.
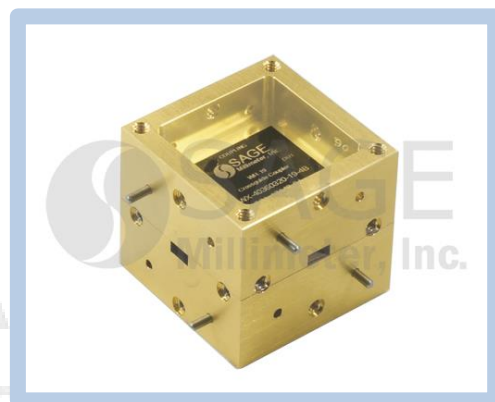
Features:

- Low Insertion Loss
- Moderate Directivity
- Four Port Configuration

Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	35 GHz		45 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:

Item	Specifications
Input	WR-22 Waveguide with UG-383/U Flange
Output	WR-22 Waveguide with UG-383/U Flange
Coupled	WR-22 Waveguide with UG-383/U Flange
Size	1.30" (L) x 1.30" (W) x 1.22" (H)
Material	Aluminum
Finish	Gold Plated
Weight	2.0 Oz
Outline	WX-BQ-4

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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)
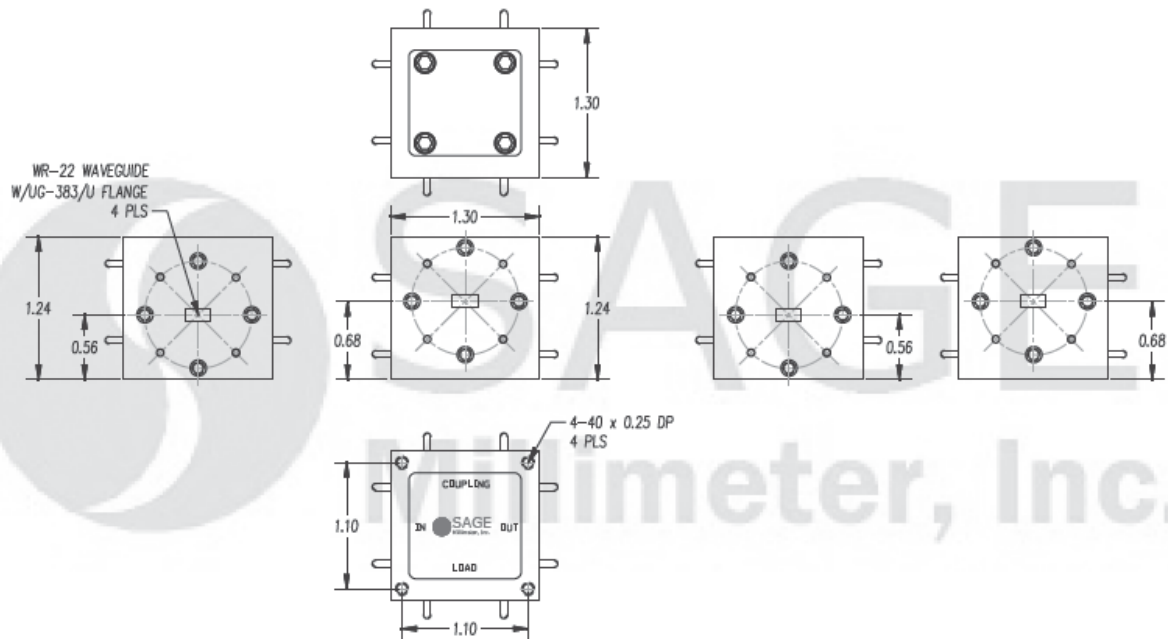
Note:
- All data was presented using a limited sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

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