

Waveguide Crossguide Coupler, W Band, 20 dB

Description:

Model SWX-753114320-10-3B is a three-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 75 to 110 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-10 waveguides with UG-387/U-M flanges.



Features:

- Low Insertion Loss
- Moderate Directivity
- Three Port Configuration

Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	75 GHz		110 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	Specification	
Input	WR-10 waveguide with UG-387/U-M flange	
Output	WR-10 waveguide with UG-387/U-M flange	
Coupled	WR-10 waveguide with UG-387/U-M flange	
Size	1.00" (L) x 1.00" (W) x 0.81" (H)	
Material	Aluminum	
Finish	Gold Plated	
Weight	0.8 Oz	
Outline	WX-BW-3	

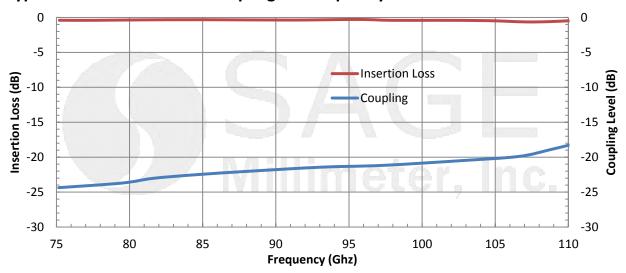


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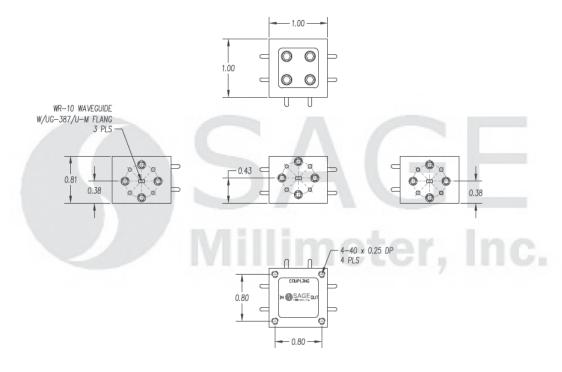


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Typical Insertion Loss and Coupling vs. Frequency



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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