



## Full Waveguide K-Band Magic Tee

### Description:

**Model SWM-183273-42-SB** is a K band magic tee that covers the frequency range of 18 to 26.5 GHz. This magic tee is a four-port hybrid coupler and/or power divider with two collinear arms, an E-plane (difference) arm, and an H-plane (sum) arm. The magic tee offers a 0.15 dB nominal insertion loss and high isolation between the two collinear arms and between the sum and difference arms. All waveguide ports have standard WR-42 waveguides with UG-595/U flanges.

### Features:

- Low Insertion Loss
- High Isolation
- Compact Package

### Applications:

- Test Labs
- Test Instrumentation
- Sub-assemblies

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		26.5 GHz
Insertion Loss		0.15 dB	
Isolation	Sum and Difference Ports	30 dB	
	Collinear Ports	15 dB	20 dB
VSWR		1.5:1	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

### Mechanical Specifications:

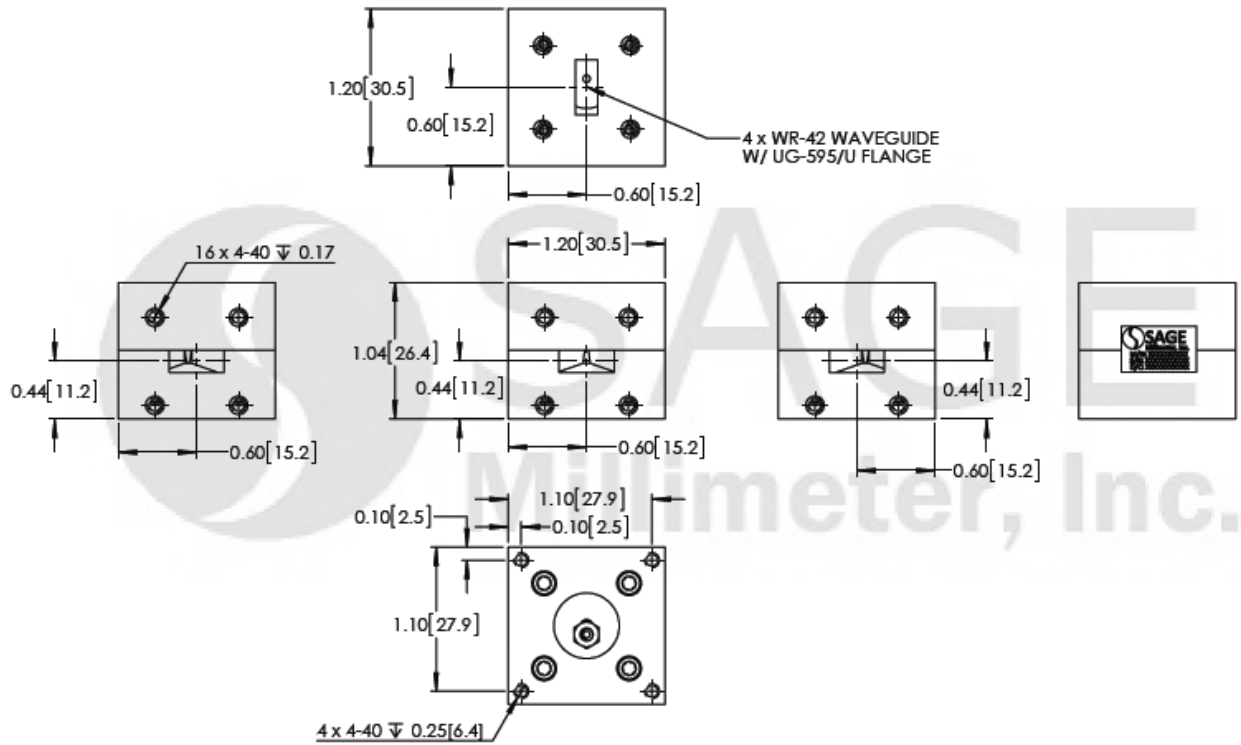
Item	Specification
Sum and Difference Ports	WR-42 Waveguide with UG-595/U Flange
Collinear Ports	WR-42 Waveguide with UG-595/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	1.6 Oz
Outline	WM-BK





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



**Note:**

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- Exceeding absolute maximum ratings shown will damage the device.
- Any foreign objects in the waveguide will degrade performance and/or damage the device.

