

# G-Band Magic Tee, 140 to 220 GHz

### **Description:**

Model SWM-14422420-05-SB is a G-band magic tee that covers the frequency range of 140 to 220 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 1.7 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-05 waveguides with UG-387/U-M anti-cocking flanges.



#### **Features:**

- Low Insertion Loss
- High Isolation
- Compact Package

## **Applications:**

- Test Labs
- Test Instrumentation
- Sub-assemblies

## **Electrical Specifications:**

Parameter		Minimum	Typical	Maximum
Frequency		140 GHz		220 GHz
Insertion Loss			1.7 dB	
Isolation	Sum and Difference Ports		30 dB	
	Collinear Ports		20 dB	
Return Loss			15 dB	
Specification Temperature			+25 °C	
Operating Temperature		-40 °C		+85 °C

## **Mechanical Specifications:**

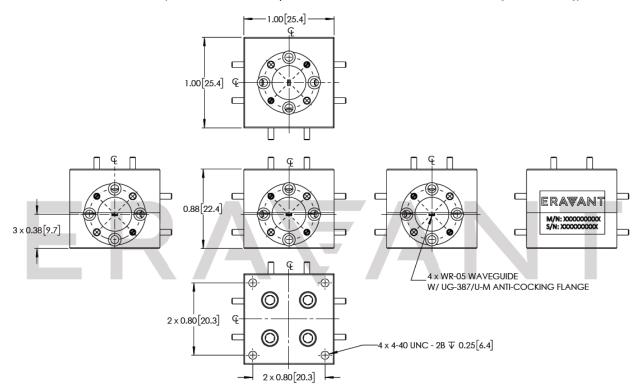
Item	Specification			
RF Ports	WR-05 Waveguide with UG-387/U-M Anti-Cocking Flange			
Material	Brass			
Finish	Gold Plated			
Weight	4.0 Oz			
Outline	WM-BG-A			



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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



#### Note:

Eravant 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.





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