

## SAN-165I165I-S1

## Ø0.165" Circular Waveguide Rotary Joint, 50 to 75 GHz

**SAN-165I165I-S1** is a Ø0.165" diameter circular waveguide rotary joint that covers the frequency range of 50 to 75 GHz. The rotary joint provides consistently low insertion loss throughout its rotation. The rotary joint also incorporates high precision bearings and propriety mechanical design to ensure smooth mechanical rotation. The rotary joint is equipped with two Ø0.165" circular waveguides with UG-385/U anti-cocking flanges. The rotary joint supports circular polarized waveforms.



## Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	50 GHz		75 GHz
Insertion Loss		1.0 dB	
Return Loss		15 dB	
Polarization		Circular	
Power Handling		100 W (CW)	250 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## Mechanical Specifications:

Item	Specification
RF Port	Ø0.165" Circular Waveguide with UG-385/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Outline	AN-CVI-165-A

## ECCN

EAR99

## FEATURES

- Frequency Range: 50 to 75 GHz
- Low Insertion Loss
- In-line Port Configuration
- No Contact Mechanism

## APPLICATIONS

- Radar System
- Test Equipment
- Sub-assemblies
- Antenna Range

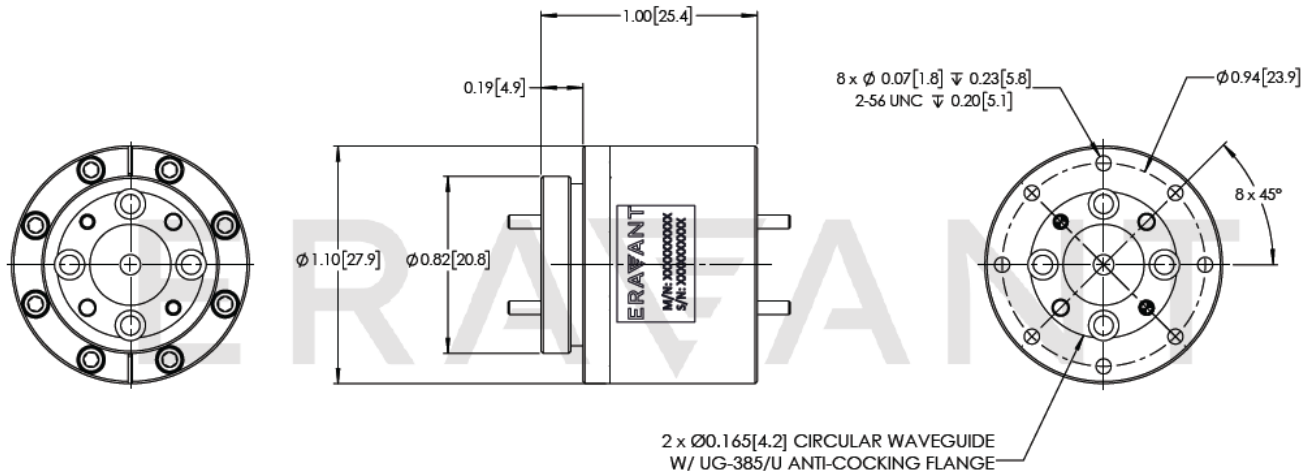
## SUPPLEMENTAL DETAILS



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### Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters]



### NOTE:

- The product presented in this datasheet is at a preliminary design stage. Final electrical and mechanical specifications may differ than what is presented.
- The datasheet product photo used is not representative of the final product.
- All testing is performed under +25°C room temperature.
- Other mechanical configurations with different lengths and other frequency bands are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

### CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.