

W-Band Waveguide Rotary Joint, 80 to 110 GHz, Circular Waveguide

Description:

SAN-80311410-094I094I-S1 is a W-band rotary joint that covers the frequency range of 80 to 110 GHz. The rotary joint provides consistently low insertion loss while mechanically rotating at the speed of 10 turns or higher per second. The rotary joint incorporates a high precision bearing and propriety mechanical design to ensure smooth mechanical rotation. The rotary joint is equipped with two Ø 0.094" circular waveguides with UG-387/U-M anti-cocking flanges. The rotary joint supports circular polarized waveforms. Other port configurations, such as WR-10 rectangular waveguides or different port orientations, are offered under different model numbers.



Features:

- Low Insertion Loss
- In-line Port Configuration
- No Contact Mechanism
- Circular Polarized Waveforms

Applications:

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	80 GHz		110 GHz
Insertion Loss		1.0 dB	
Return Loss		15 dB	
Polarization	Circular		
Rotating Speed		10 Turns/Second	
Power Handling		100 W (CW)	250 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

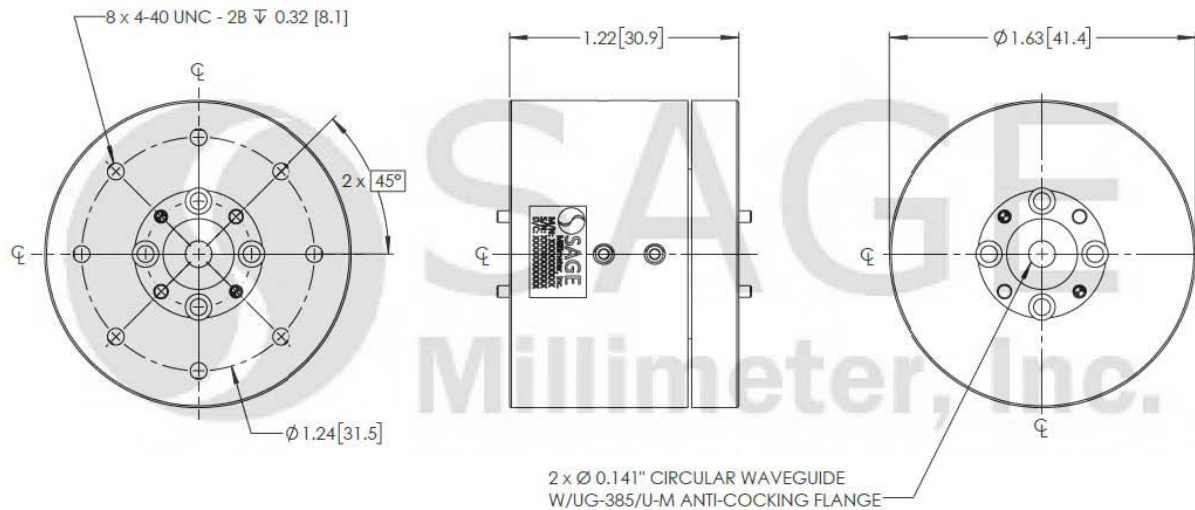
Mechanical Specifications:

Item	Specification
RF Ports	Ø 0.094" Circular Waveguide with UG-387/U-M Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	8 Oz
Outline	AN-CWI-094-A



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



Note:

- SAGE Millimeter, Inc. 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.

