SAG-7438033203-125-S1

Advanced

E Band Gaussian Optics Antenna, 0.125” Diameter Circular Waveguide

Description:

Model SAG-7438033203-125-S1 is a 3” E-band Gaussian antenna that operates from 73.5 to 79.5 GHz. The Gaussian antenna delivers a 32 dBi nominal gain and 3.0 degree half power beamwidth. The antenna supports both linear and circular polarized waveforms and employs a corrugated feed horn to offer excellent aperture efficiency, high cross polarization rejections, and low sidelobe levels. This model is equipped with a 0.125’’ diameter circular waveguide and UG-387/U flanges as its input ports. By adding a mode transition, SAGE Millimeter model number SWT-12125-SB, the input port becomes a standard WR-12 waveguide, which can support only linear polarized waveforms.

Features:

- Center Fed
- Low Sidelobes
- Low Cross Polarization
- Linear and Circular Polarization

Applications:

- Radar Systems
- Communication Systems
- Plasma Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	73.5 GHz	76.5 GHz	79.5 GHz
Gain		32 dBi	
3 dB Beamwidth		3.0˚	
Sidelobes		-20 dB	
Polarization		Linear and Circular	
Return Loss		21 dB	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Antenna Port	0.125” Dia Circular Waveguide with UG-387/U Flange
Material	Aluminum
Finish	Black Anodized
Weight	1.4 lbs
Lens Diameter	3.0”
Dimensions	3.50” (Ø) x 5.55” (L)
Outline	AG-CE32-125

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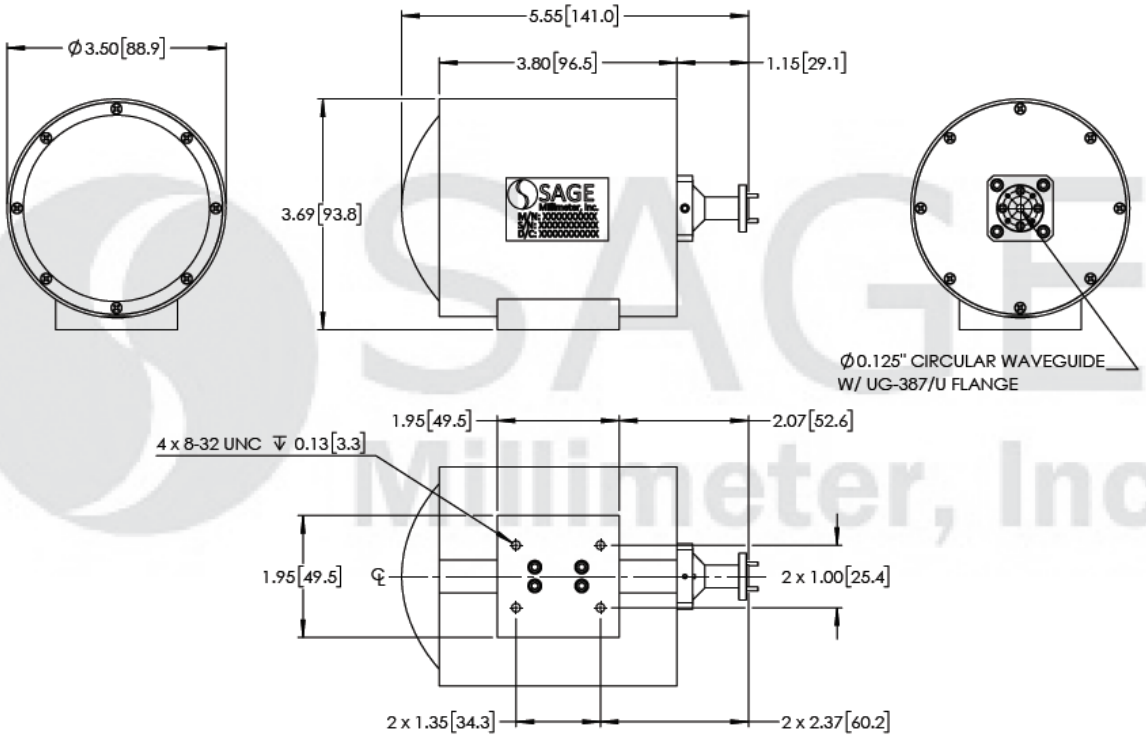
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches[millimeters])



Note:

- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.
- The operation frequency of the antenna can be extended to a wider range with small performance degradation at the edges of the band.

Caution:

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

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