



## Ka-Band Spot-Focusing Lens Antenna, 35 GHz, Focal Length 10 cm

### Description:

**Model SAQ-353039-28-S1** is a Ka-band spot-focusing lens antenna that delivers a 3 dB spot size of 1.16" at a focal length of 3.94" (10 cm). The antenna employs a low loss lens to offer excellent aperture efficiency at 35 GHz. The lens antenna is equipped with a standard WR-28 waveguide and UG-599/U flange as its input port. It supports linear polarized waveforms.



### Features:

- Ridged Mechanical Configurations
- High Efficiency and Low loss
- Low Sidelobe Levels

### Applications:

- Scientific Instruments
- Material Research Instruments

### Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency		34.0 GHz	35.0 GHz	36.0 GHz
Frequency Bandwidth			±500 MHz	
Focal Length			3.94"	
Peak to First Null	Spot Size		3.39"	
	Power Captured		83.8%	
10 dB Below Peak	Spot Size		1.96"	
	Power Captured		78.9%	
3 dB Below Peak	Spot Size		1.16"	
	Power Captured		47.4%	
Polarization			Linear	
VSWR			1.2:1	
Specification Temperature			+25°C	
Operating Temperature		-40°C		+85°C

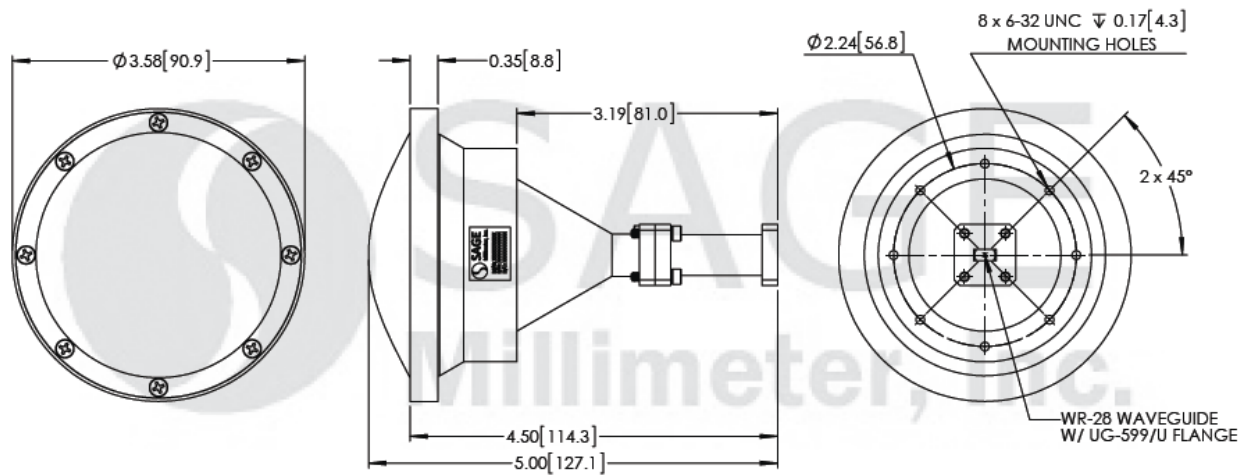
### Mechanical Specifications:

Item	Specification
Antenna Port	WR-28 Waveguide with UG-599/U Flange
Horn Material	Aluminum
Finish	Chem Film
Weight	5.2 Oz
Lens Diameter	3.3"
Dimensions	5.00" (L) x 3.58" (Ø)
Outline	AQ-RA-3.0



## Ka-Band Spot-Focusing Lens Antenna, 35 GHz, Focal Length 10 cm

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

**Note:**

- All data are presented using a limited sample lot. Actual data may vary unit to unit.
- All testing was performed under +25°C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

**Caution:**

- Foreign objects in the waveguide will affect the antenna performance and may damage the antenna.

