SAC-2507-250-S2-AU

Ka-Band Conical Horn Antenna, 25 dBi Gain

SAC-2507-250-S2-AU is a Ka-band conical horn antenna that operates from 33 to 38.5 GHz. The antenna offers 25 dBi nominal gain and a typical half power beamwidth of 9 degrees on the E-plane and 10 degrees on the H-plane. The horn also offers typical sidelobes of -18 dB on the E-plane and -28 dB on the H-plane. The conical horn can support linear and circular polarization. The input of this antenna is a 0.250" diameter circular waveguide with UG-599/U-M flange.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range*	33 GHz		38.5 GHz
Gain		25 dBi	
3 dB Beamwidth, E-Plane		9°	
3 dB Beamwidth, H-Plane		10°	
Sidelobes, E-Plane		-18 dB	
Sidelobes, E-Plane		-28 dB	
Return Loss		23 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

*Note: Can operate from 31 to 40 GHz if the dominant mode is maintained

Mechanical Specifications:

Item	Specification
Antenna Port	0.250" Ø Circular Waveguide with UG-599/U-M Flange
Material	Aluminum
Finish	Gold Plated
Weight	2.5 Oz
Size	6.00" (L) x 2.60" (Ø)
Outline	AC-CA3-250

ECCN

EAR99

FEATURES

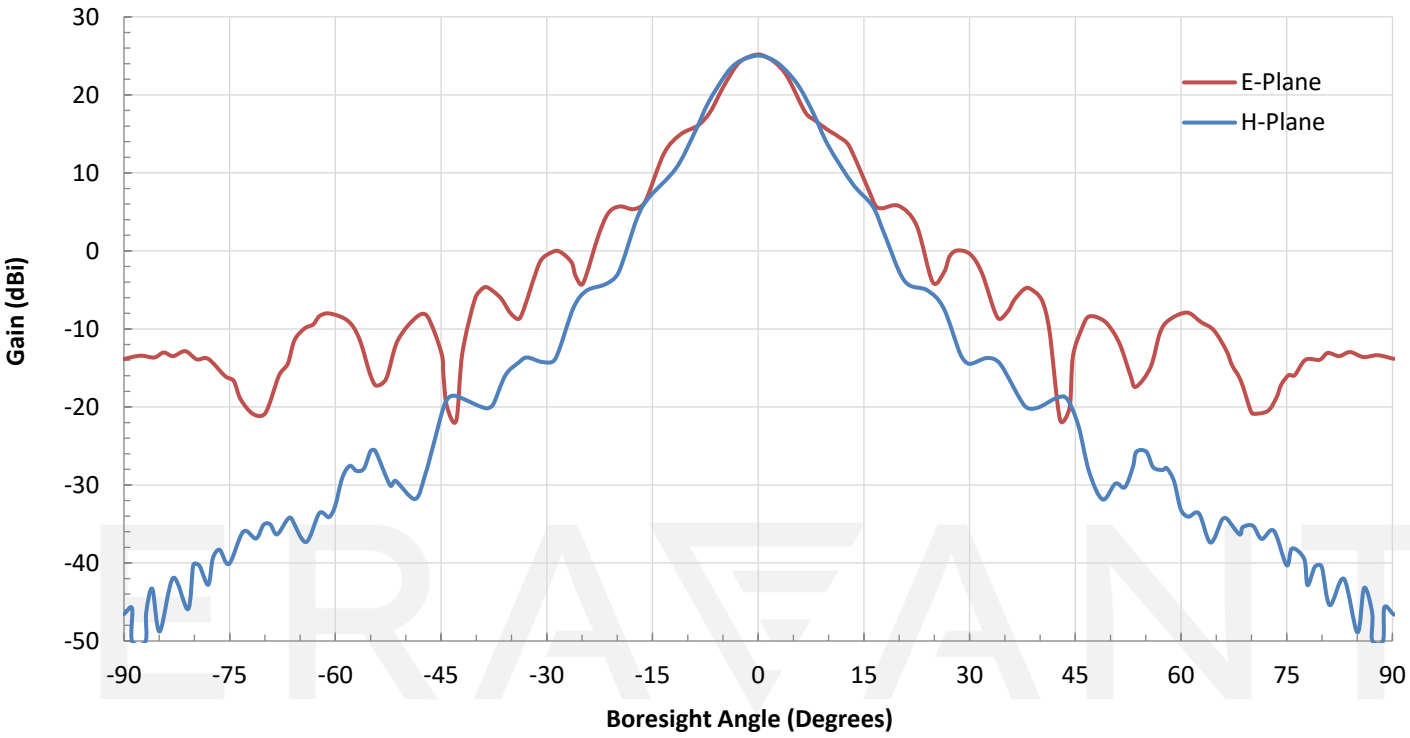
- Circular Waveguide Interface
- Precisely Machined
- High Return Loss
- Linear and Circular Polarization

APPLICATIONS

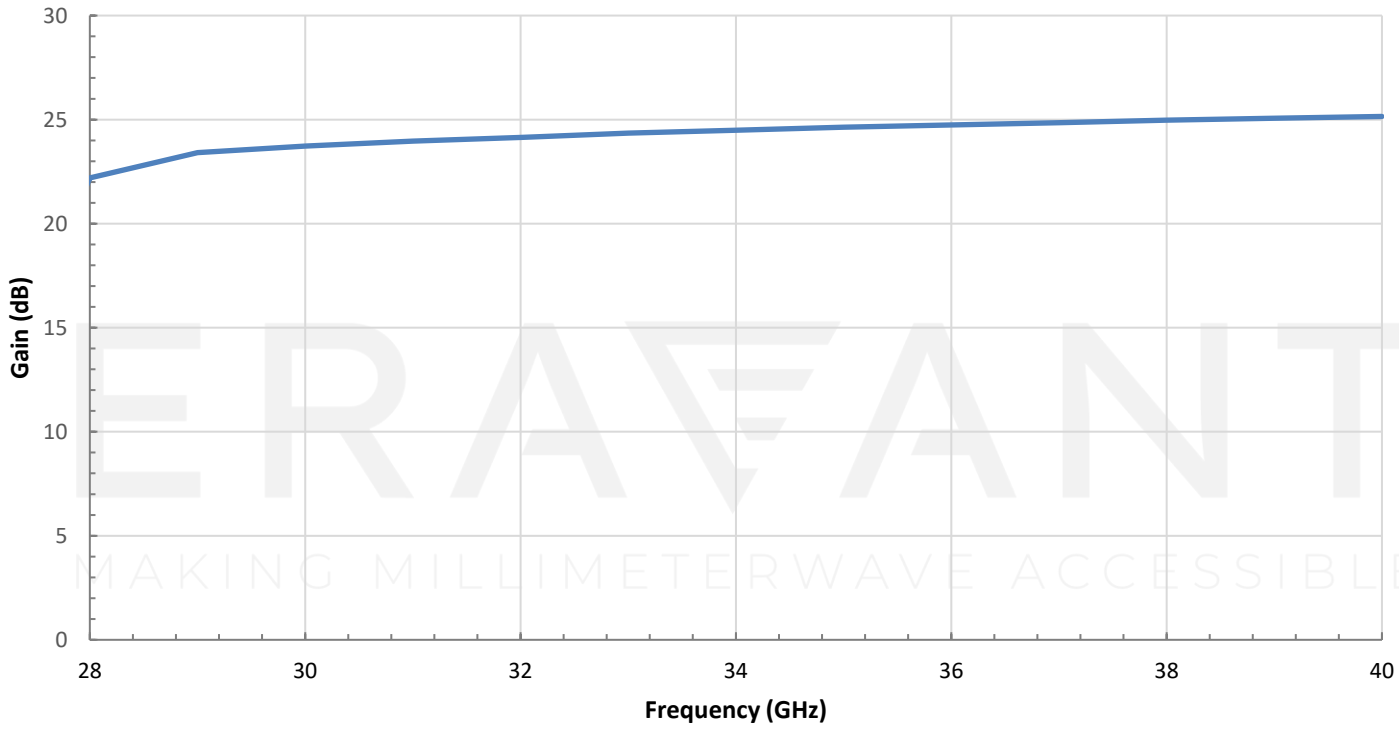
- Antenna Ranges
- Feed Horns
- Systems Setups

SUPPLEMENTAL DETAILS

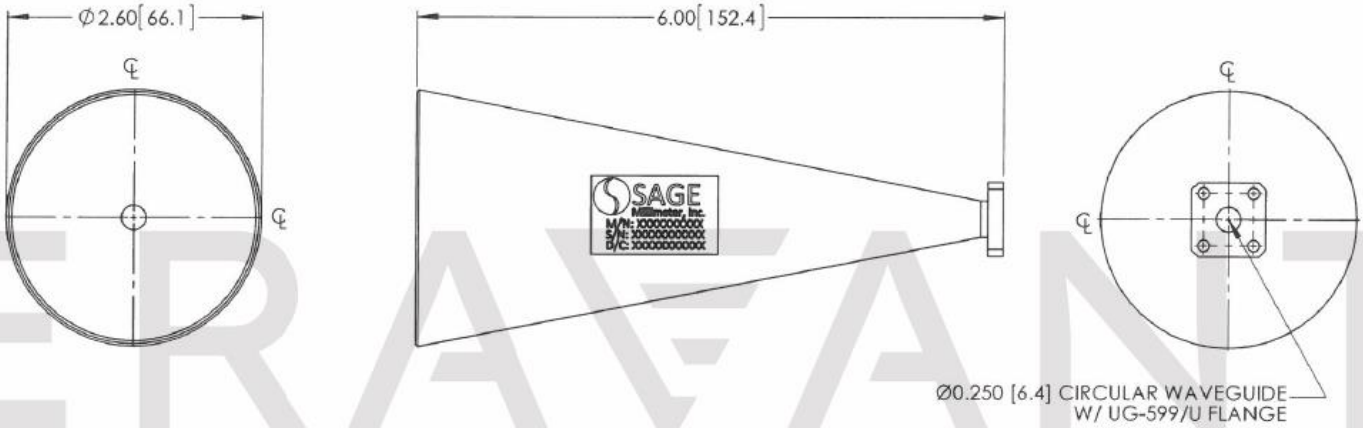
Simulated Antenna Pattern @ 35.75 GHz



Simulated Gain vs Frequency



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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.