

Dual Ridged Horn Antenna, 6 to 53 GHz

SAV-0635331429-2F-S1 is a dual ridged broadband horn antenna that operates from 6 to 53 GHz. The antenna offers a typical gain of 14 dBi and a typical 3 dB beamwidth of 29 degrees on both the E-plane and H-plane, respectively. The antenna supports linear polarized waveforms . The antenna includes a mounting plate with a 1/4-20 threaded hole and various other mounting holes for flexile mounting capacity. The RF port is equipped with a 2.4 mm (F) connector.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	6 GHz		53 GHz
Gain		14 dBi	
Polarization	Linear and Circular		
E-Plane 3 dB Beamwidth		29°	
H-Plane 3 dB Beamwidth		29°	
Sidelobe Level, E Plane		-15 dB	
Sidelobe Level, H Plane		-10 dB	
Return Loss		10 dB	
Cross Polarization		30 dB	
Power Handling			10 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification	
Antenna Ports	2.4mm (F)	
Mounting	Mounting Bracket with 1/4-20 Threaded Hole	
Material	Aluminum	
Finish	Chem Film (Antenna), Black Anodized (Mounting Bracket)	
Weight	1.5 oz	
Outline	AV-C14-DR-2	

ECCN

EAR99

FEATURES

- Coaxial Connector for RF Input
- Broadband Coverage
- · Circular and Linear Polarization
- Good Impedance Match

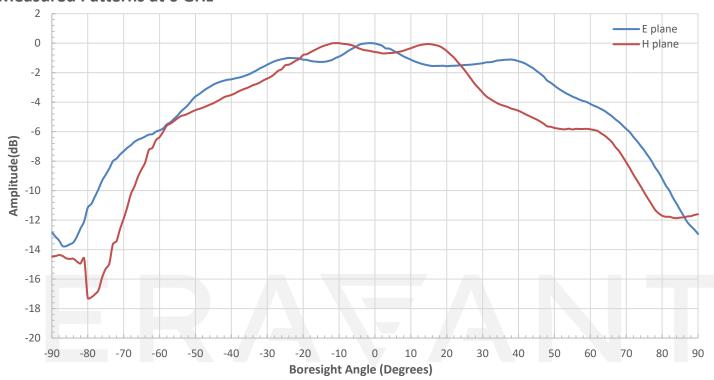
APPLICATIONS

- · Antenna Ranges
- Antenna Gain Measurements
- System Setups

SUPPLEMENTAL DETAILS



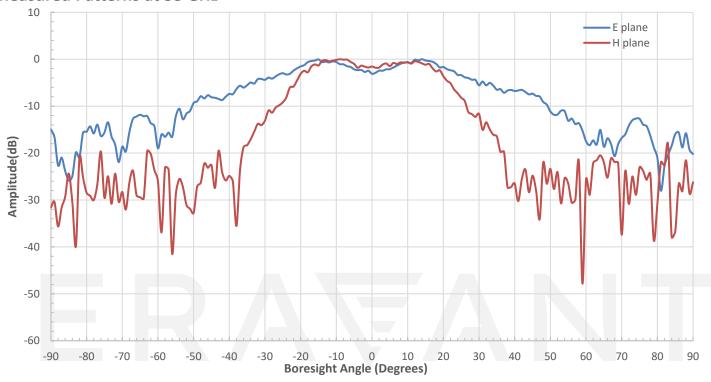
Measured Patterns at 6 GHz



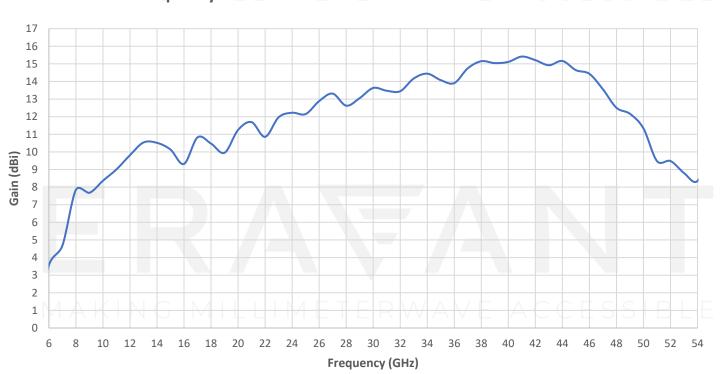
Measured Patterns at 29.5 GHz



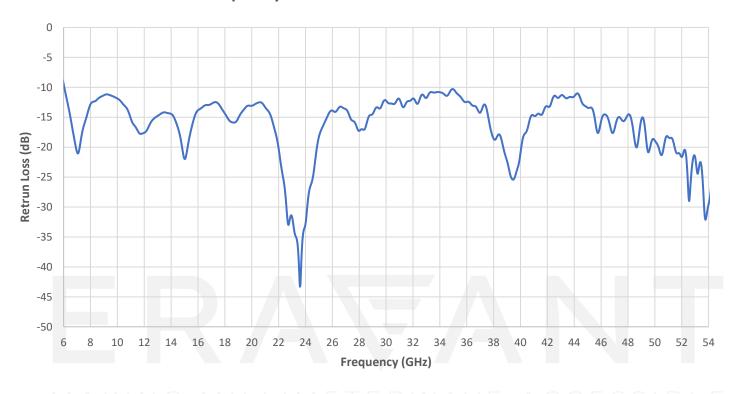
Measured Patterns at 53 GHz



Measured Gain vs Frequency

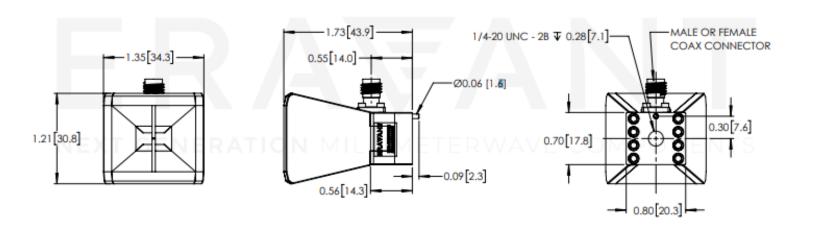


Measured Return Loss vs Frequency



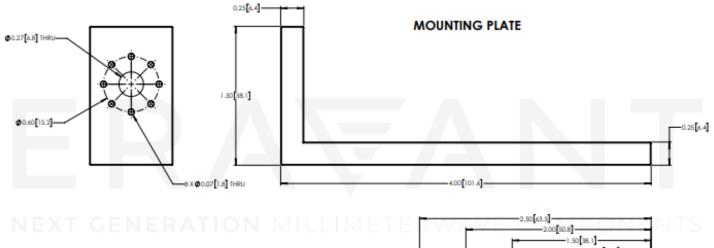
MAKINO MILLIMETERWAVE ACCESSIBLE

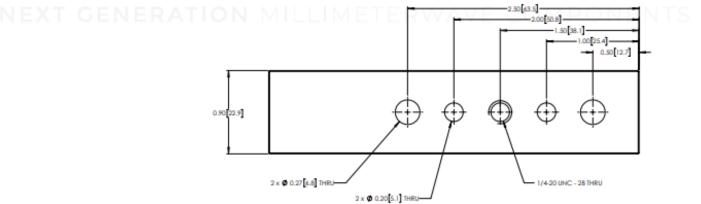
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])





Mounting Bracket Outline:





NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.
- Picture shown does not represent the actual unit. The outline shows the most accurate structure of the final model.

CAUTION:

• Any foreign objects in the antenna will cause performance degradation and may damage or destroy the unit.

MAKING MILLIMETERWAVE ACCESSIBLE