

Dual Ridged, Dual Polarization Horn Antenna, 18 to 40 GHz

Description:

Model SAC-1834031621-KF-S5-DP is a dual-rigged, dual polarized horn antenna that covers the frequency range of 18 to 40 GHz. The antenna offers 17 dB nominal gain and a half power beamwidth of 19 degrees on the E-plane and 14 degrees on the H-plane at center frequency. The antenna also offers a 15 dB typical side lobe level and a nominal isolation of 30 dB. The input ports of this antenna are female K connectors. The antenna measures 5.75" long and weighs 5 ounces typically.



Features:

- Coaxial Connectors for RF Inputs
- Broadband Width
- Dual Polarization
- Moderate Gain

Applications:

- Communication Systems
- Radar Systems
- Antenna Ranges
- System Setups

Electrical Specifications:

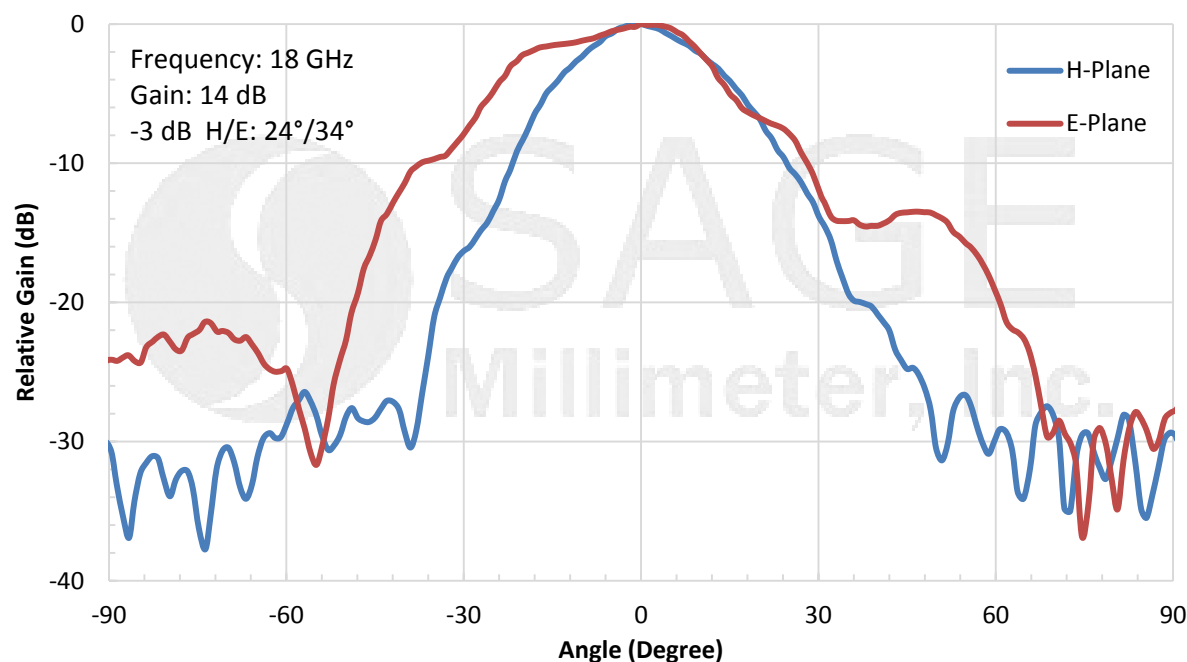
Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		40 GHz
Gain, 28 GHz		17 dB	
E-Plane 3 dB Beamwidth, 28 GHz		19°	
H-Plane 3 dB Beamwidth, 28 GHz		14°	
Side Lobe Level		-15 dB	
Isolation	20 dB	30 dB	
VSWR		2.0:1	
Specification Temperature		+25°C	
Operating Temperature	-45°C		+85°C

Mechanical Specifications:

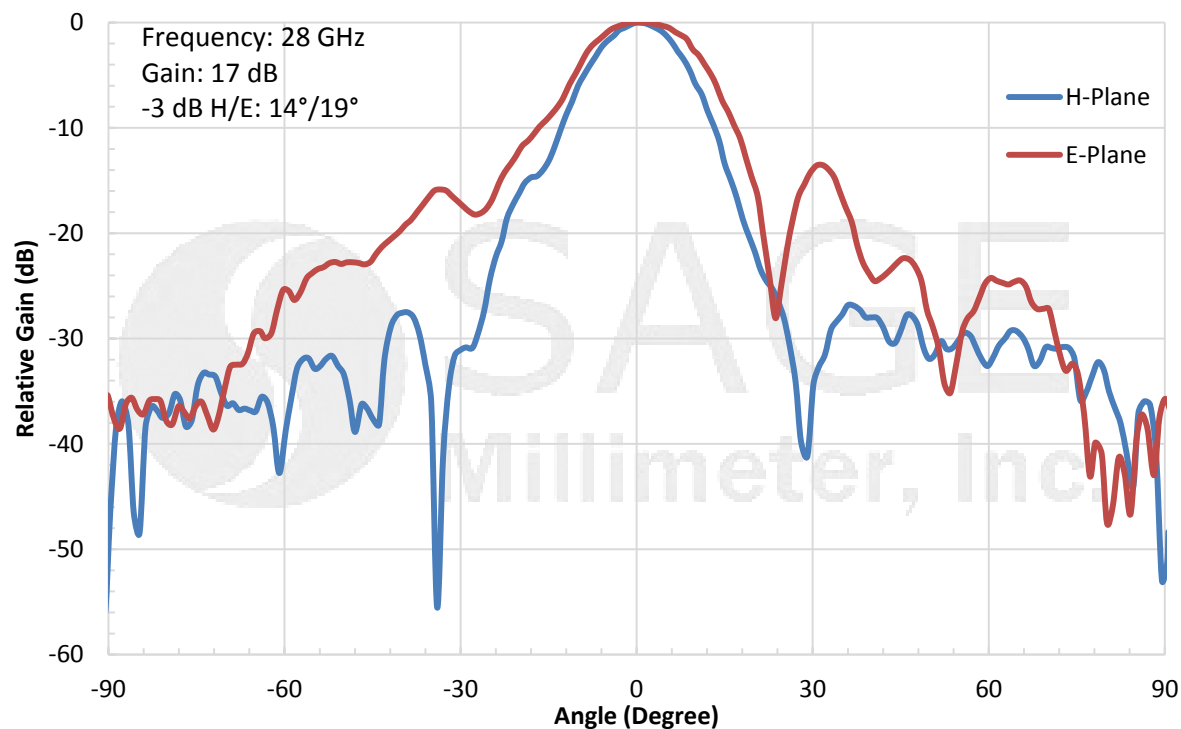
Parameter	Connector
Antenna Ports	K(F)
Mounting	0.18" Diameter Through Holes
Material	Aluminum Alloy
Inner Finish	Chem Film
Outer Finish	Black Paint
Size	2.48" (Ø) x 5.75" (L)
Outline	AC-TK16-DP-H1
Weight	5.0 Oz

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Typical Gain and Radiation Patterns @ 18 GHz

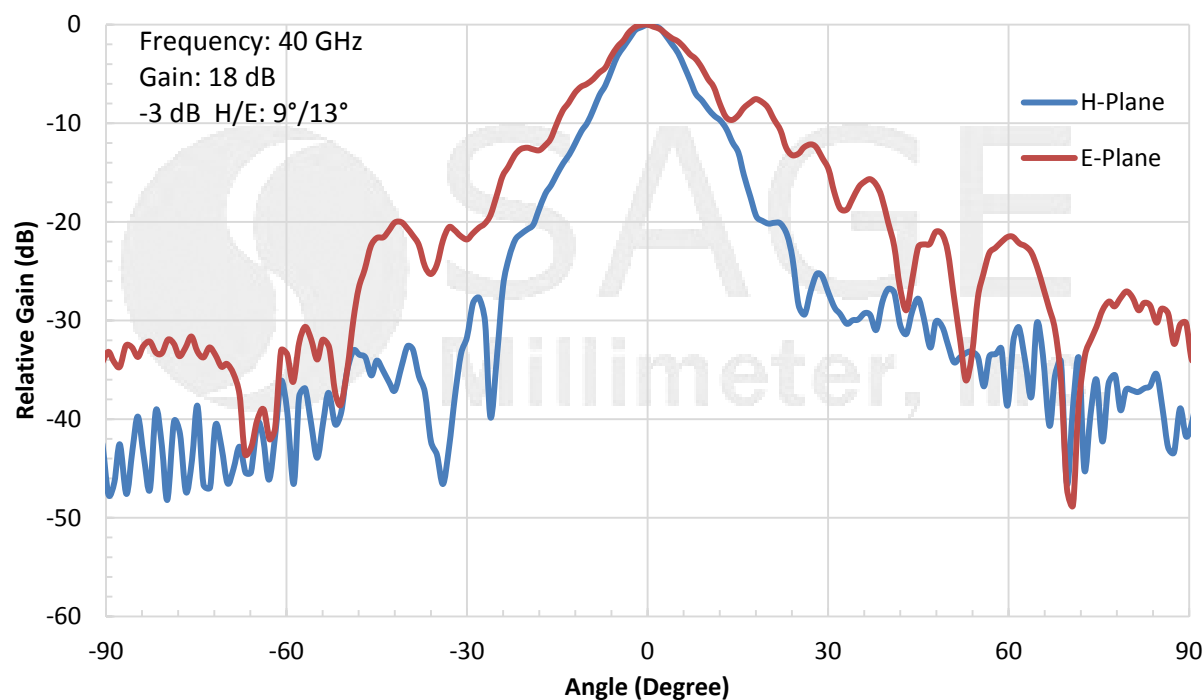


Typical Gain and Radiation Patterns @ 28 GHz

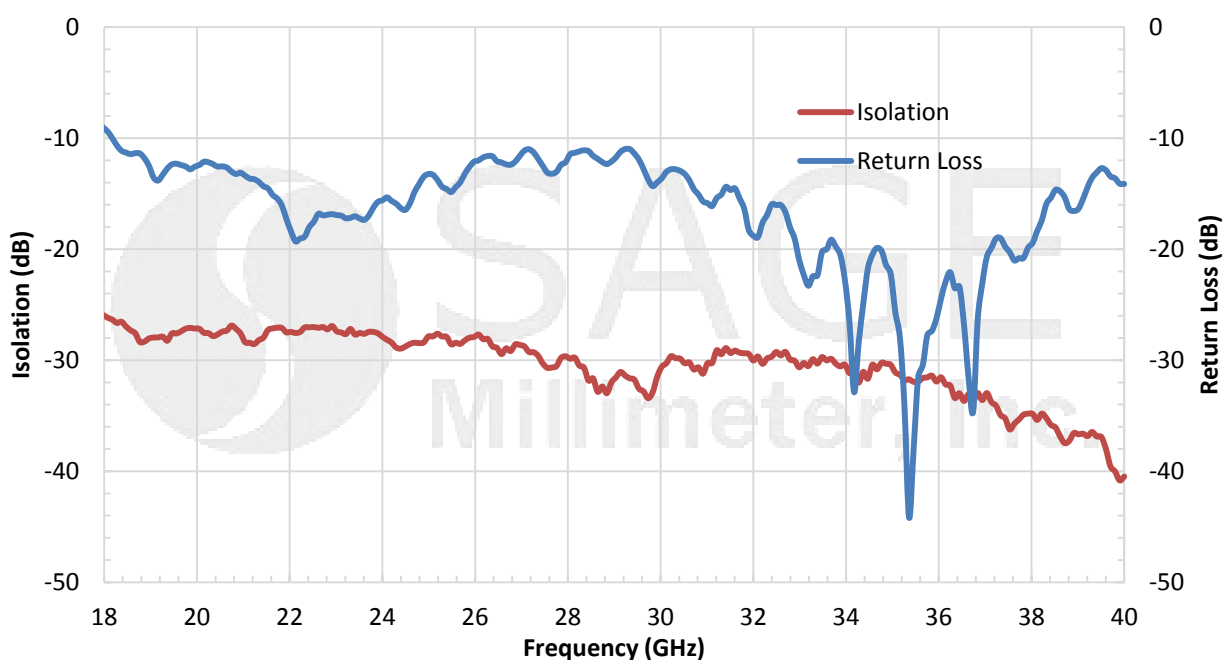


Dual Ridged, Dual Polarization Horn Antenna, 18 to 40 GHz

Typical Gain and Radiation Patterns @ 40 GHz

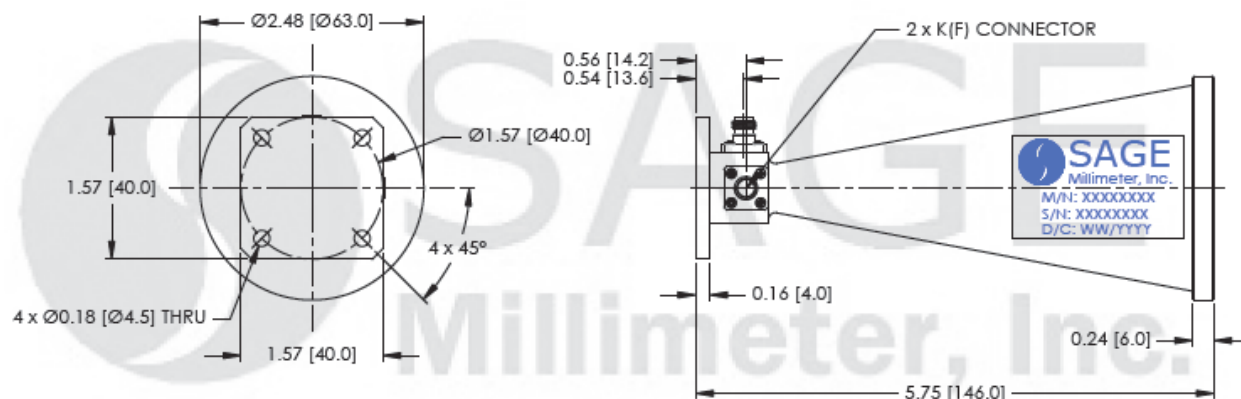


Typical Isolation and Return Loss vs. Frequency



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



Note:

- All data are presented by using a limited sample lot. Actual data may vary unit to unit.
- 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.

