

MODEL NUMBER:

**DRHA40G**

**DUAL-RIDGED HORN ANTENNA, 18 TO 40 GHz**

### DESCRIPTION:

Model DRHA40G is a dual-ridged horn antenna that operates from 18 to 40 GHz. The antenna offers a nominal gain between 12 and 17 dBi and a typical 3 dB beamwidth between 20° and 43°. The antenna supports linear polarized waveforms and features a four-hole mounting plate. The RF port offers a female K connector.

### FEATURES:

- Coaxial Connector for RF Input
- Broadband
- Linear Polarization
- Good Impedance Match

### APPLICATIONS:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

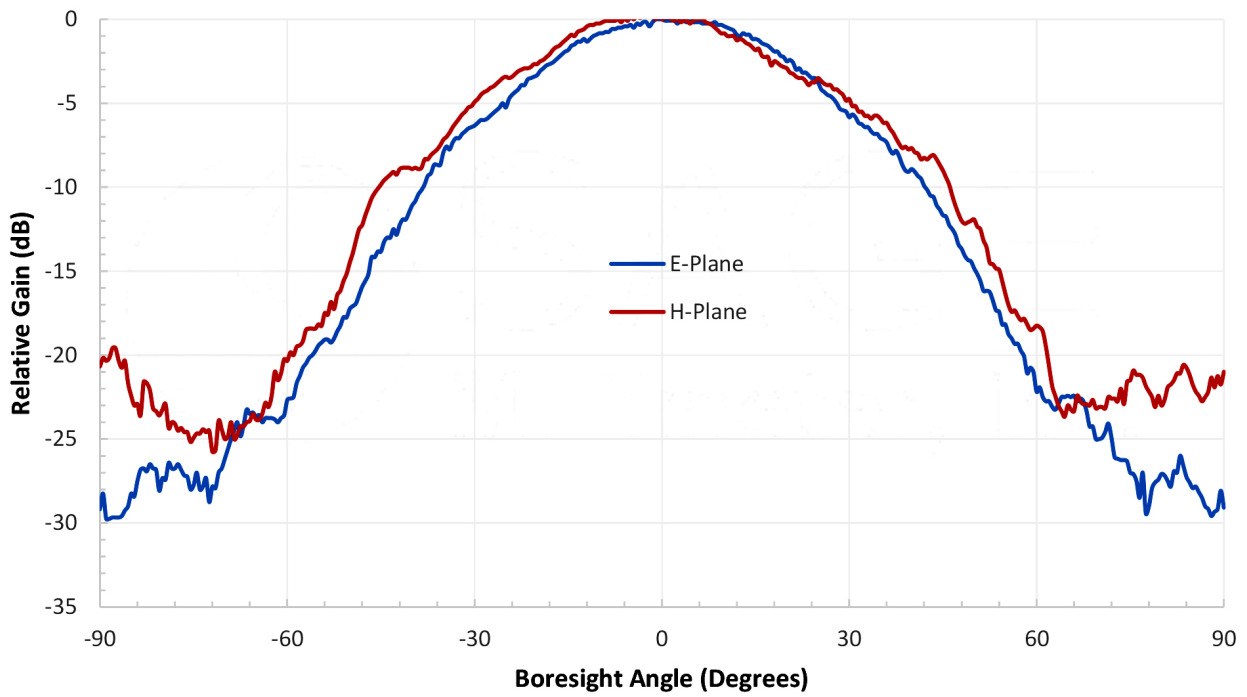
### ELECTRICAL SPECIFICATIONS:

PARAMETER	MINIMUM	TYPICAL	MAXIMUM
Frequency	18 GHz		40 GHz
Gain		12 to 17 dBi	
Polarization		Linear	
3 dB Beamwidth		20 to 43°	
10 dB Beamwidth		36 to 92°	
Return Loss		11.0 dB	
Power Handling		20 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

### MECHANICAL SPECIFICATIONS:

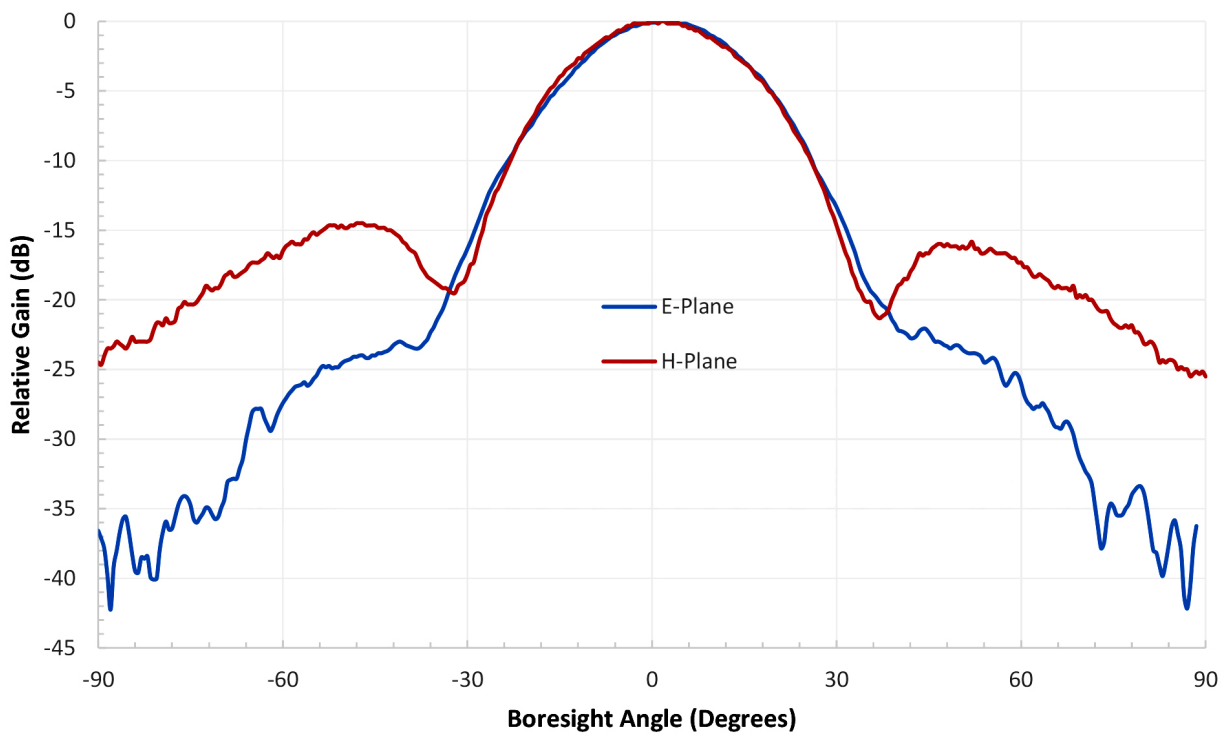
ITEM	SPECIFICATION
Antenna Port	K(F)
Mounting	Ø 0.16" Thru Holes
Size	2.84" (L) X 2.00" (W) X 2.00" (H)
Material	Aluminum
Antenna Finish	Gold Plated
Mounting Plate Finish	Chem Film
Weight	2.5 Oz
Outline	AR-AK14-DR

## TYPICAL ANTENNA PATTERN @ 40 GHZ



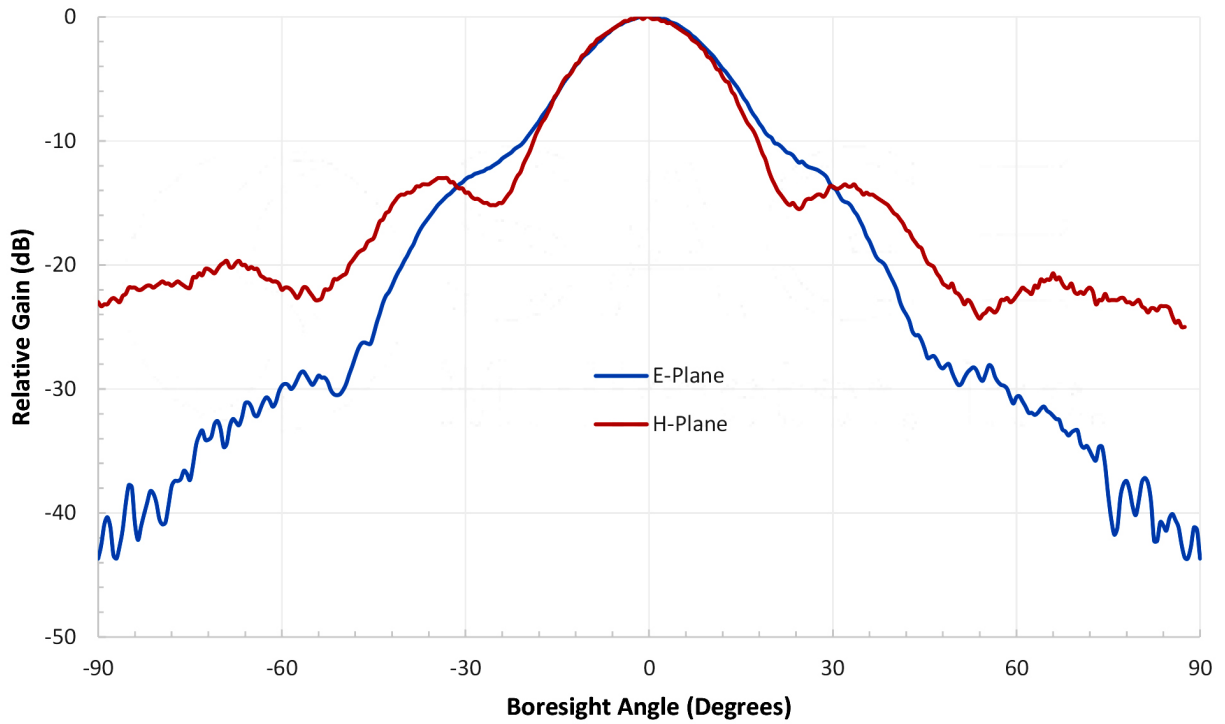
## TYPICAL ANTENNA PATTERN @ 29 GHZ

### Typical Antenna Pattern @ 29 GHz



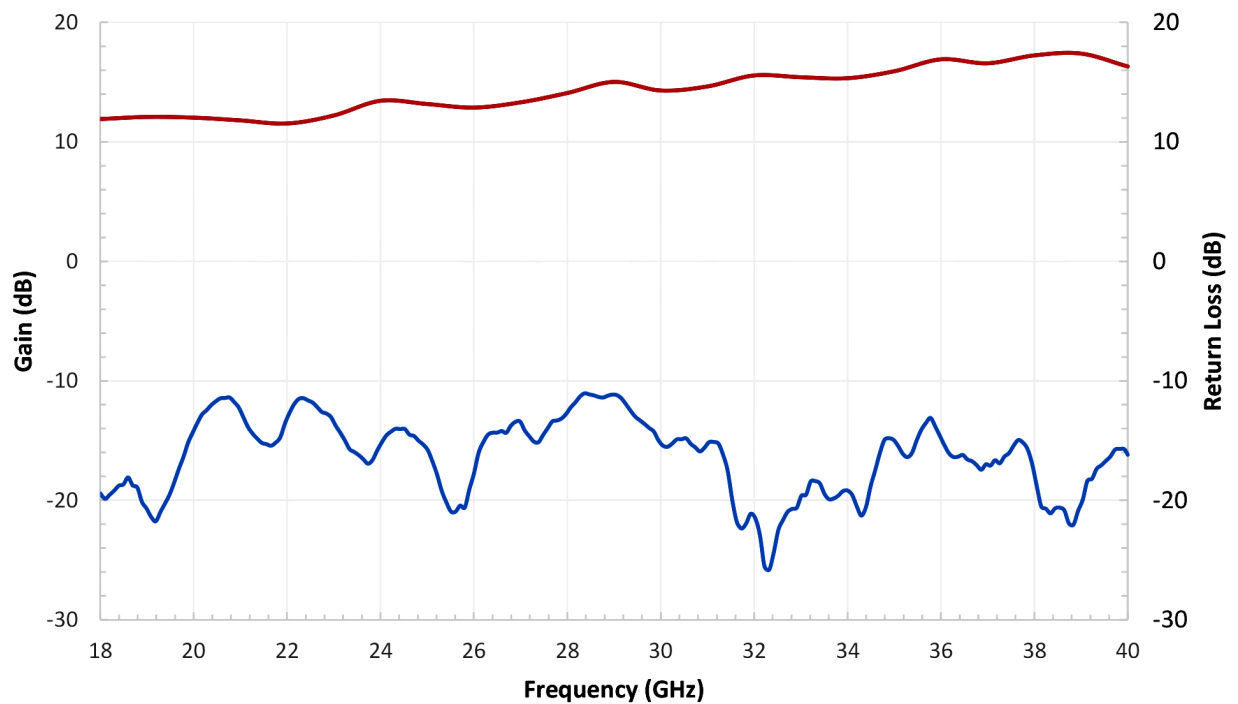
## TYPICAL ANTENNA PATTERN @ 40 GHZ

### Typical Antenna Pattern @ 40 GHz

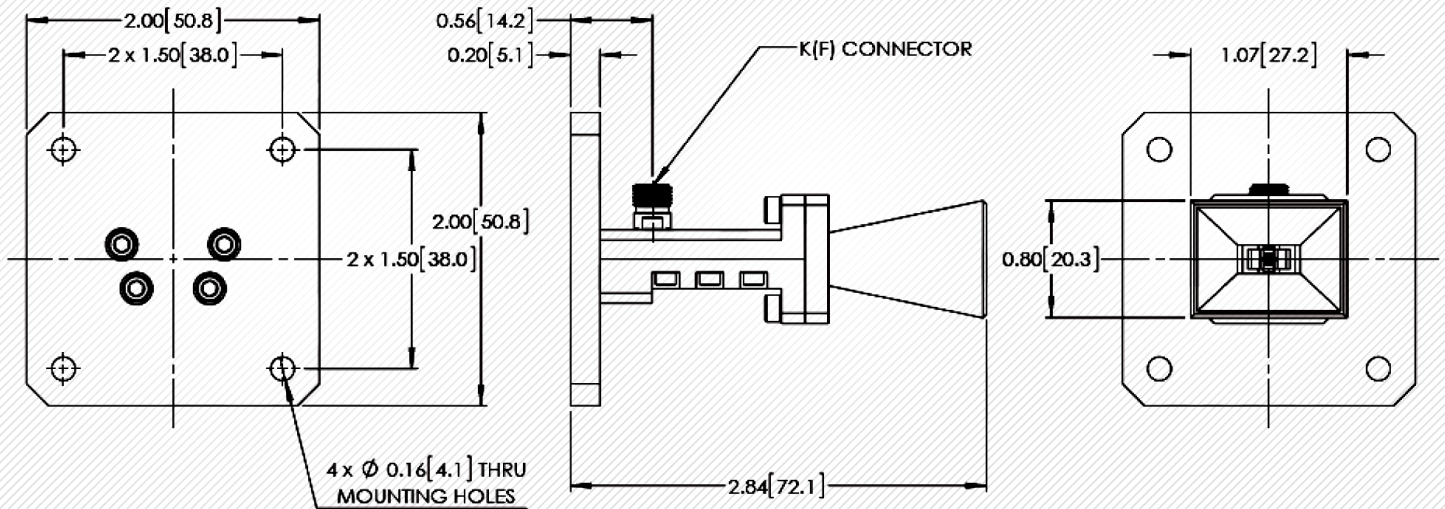


## TYPICAL GAIN AND RETURN LOSS VS. FREQUENCY

### Typical Gain and Return Loss vs. Frequency



**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.
- The EMC Shop, LLC 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.

