





#### **DESCRIPTION:**

Model HA26G is a K-band pyramidal horn antenna that operates from 18 GHz to 26.5 GHz. The antenna offers 26 dBi nominal gain and a typical half power beamwidth of 8 degrees on the E-plane and H-plane. The antenna supports linear polarized waveforms. The input of this antenna is a WR-42 waveguide with UG-595/U flange.

### FEATURES:

- Rectangular Waveguide Interface
- Precisely Machined
- Linear Polarization
- High Return Loss

#### APPLICATIONS:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

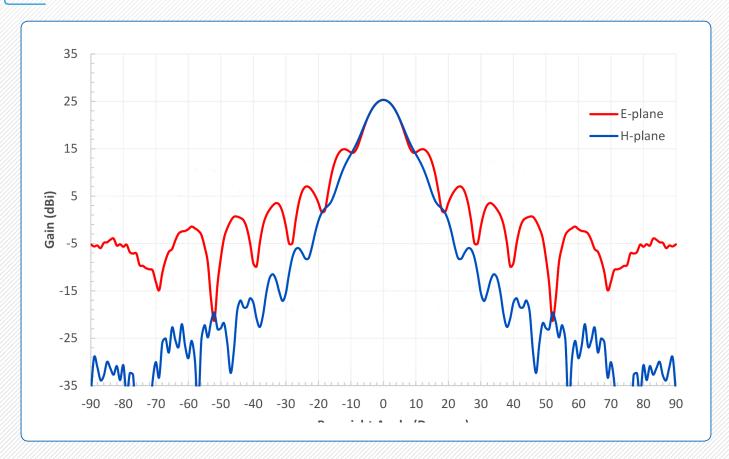
### **ELECTRICAL SPECIFICATIONS:**

PARAMETER	MINIMUM	TYPICAL	MAXIMUM
Frequency	18 GHz		26.5 GHz
Gain	24.5 dBi	26 dBi	27 dBi
Polarization		Linear	
3 dB Beamwidth, E-Plane		8°	
3 dB Beamwidth, H-Plane		8°	
Sidelobes, E-Plane		-10 dB	
Sidelobes, H-Plane		-25 dB	
Return Loss		30 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

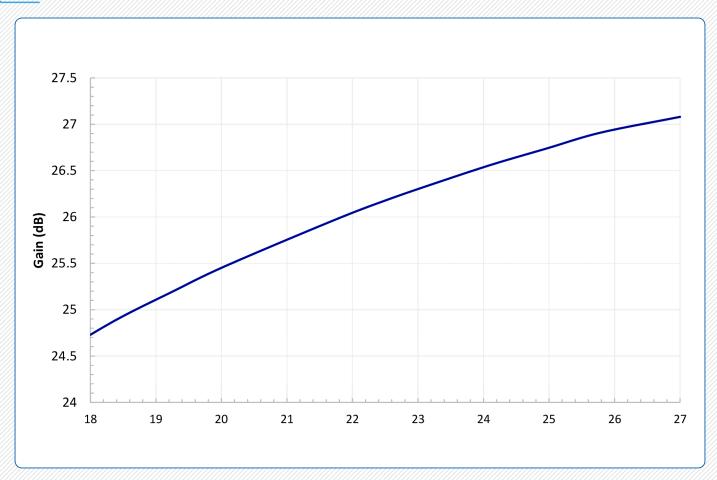
### **MECHANICAL SPECIFICATIONS:**

ITEM	SPECIFICATION
Antenna Port	WR-42 Waveguide
Flange Type	UG-599/U Flange
Size	13.78" (L) X 4.72" (W) X 3.35"(H)
Material	Copper
Finish	Inside: Silver Plated; Outside: Grey Paint
Weight	2.5 Oz
Outline	AR-A3

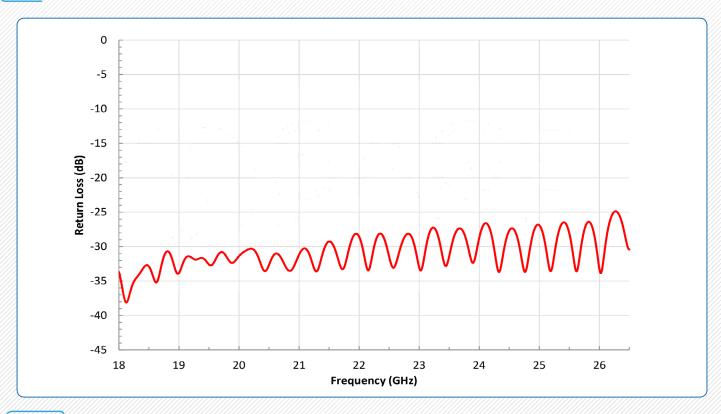
## SIMULATED ANTENNA PATTERN @ 22.25 GHZ



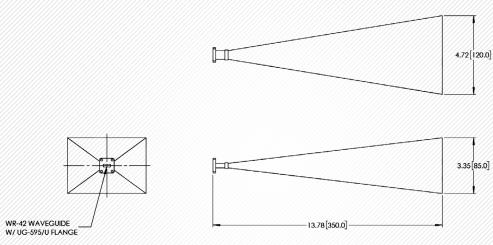
# MEASURED GAIN VS. FREQUENCY



# SIMULATED RETURN LOSS VS. FREQUENCY



## MECHANICAL OUTLINE: (UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES [MILLIMETERS])



### NOTE:

- All data presented are simulated. 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.



