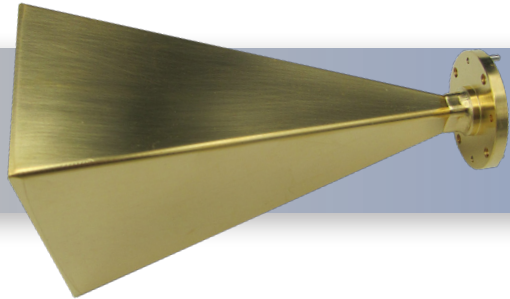


Part No:

# HWSGH22-23-ER



## *WR-22 Rectangular Standard Gain Horn Antenna 23 dBi Typical Gain, Q Band – 33 to 50 GHz*

**HWSGH22-23-ER** is an Q-band WR-22 waveguide standard rectangular gain horn antenna that operates from 33 GHz to 50 GHz. The antenna offers 23 dBi typical gain, precisely electroformed over a mandrel and gold plated. These horns have a pyramidal shape with a rectangular aperture. The standard gain horn antenna supports linear polarized waveforms. The input of this antenna is a WR-22 waveguide with UG-383/U MOD flange. The standard gain horn antenna is used for antenna range calibration and general-purpose system set ups.

Horns with different gain values can be special ordered. Rectangular Horns are available in sizes WR3 to WR42.

### Applications

- Low F/D Antennas
- Surveillance Systems
- Offset Feed Antenna

HASCO's Standard Rectangular Gain Horns are used in a wide variety of applications, such as antenna testing and RF radiation pattern measurement. HASCO gain horns function as a calibration standard or as reference for antenna gain measurement. They are also used as feed horns for lens and reflector antennas or stand-alone antennas in subsystems.

### Electrical

• Impedence	50 Ohms
• Frequency Range	33-50 GHz
• VSWR	1.10:1 Max
• Input	WR-22 Waveguide
• Flange	UG-383/U MOD
• Series	Directional
• Polarity	Vertical
• Temperature Range	-55°C - 85°C

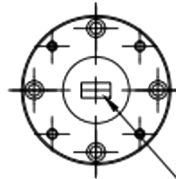
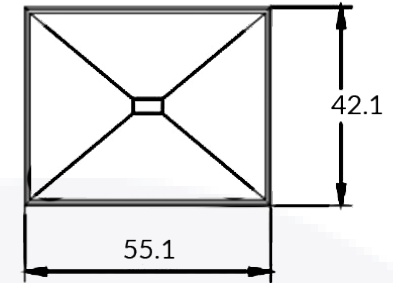
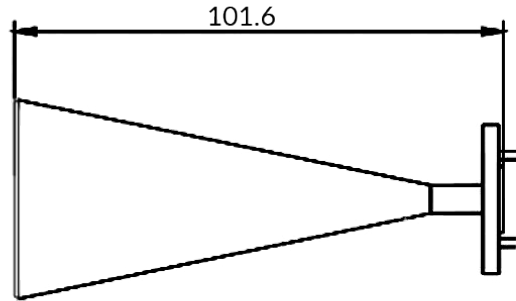
### Mechanical

• Body Material	Gold Plated Electroformed Copper
• WG A DIM	0.2240 inch
• WG B DIM	0.1120 inch

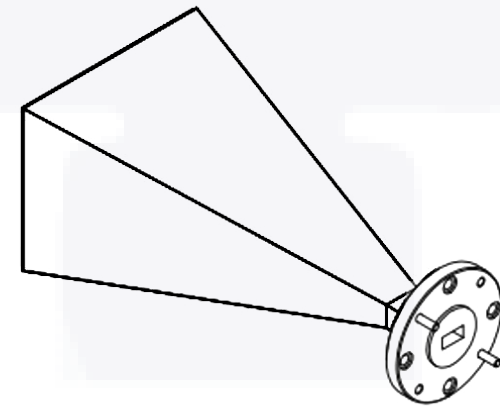
Note: All plating thickness values are in micro-inches.

# WR-22 Rectangular Standard Gain Horn Antenna, 23 dBi Typical Gain, Q Band | 33-50 GHz | Outline Drawing

Measurement (inches)	
Length	4.070
Width	2.170
Height	1.656
Flange	1.125 Round



WR-22 WAVEGUIDE  
W/UG-383/U FLANGE



LTR	DESCRIPTION	DATE	APPR.	DRAWN BY: NS	CHECKED BY: JMS
-	RELEASE	07/22	TAC	APPROVED BY: TAC	
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5214 Bonsai Street • Moorpark, CA 93021  
 (888) 498-3242 • sales@hasco-inc.com  
[www.hasco-inc.com](http://www.hasco-inc.com)

MATERIALS: SEE DATA SHEET	CAGE CODE: 0T8L4	SCALE: N/A	SIZE: A
FINISHES: SEE DATA SHEET	PART NO./DRAWING NO. <b>HWSGH22-23-ER</b>		REV: B