



# WR-112 Waveguide Standard Gain Horn Antenna Operating from 7.05 GHz to 10 GHz with a Nominal 10 dBi Gain with Square Cover Flange

## Waveguide Antennas Technical Data Sheet

PE9858-10

### Features

- Rectangular Waveguide Interface
- 7.05 GHz to 10 GHz
- 10 dBi Nominal Gain
- Square Cover Flange

### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

### Description

Pasternack's PE9858-10 WR-112 waveguide standard gain horn antenna operating from 7.05 GHz to 10 GHz with a nominal 10 dBi gain is part of our full line of RF components available for same-day shipping. This Pasternack pyramidal horn antenna has a lightweight anodized aluminum body and a precision tolerance square cover flange. The PE9858-10 WR-112 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 56.8 degrees of half power beam width.

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance across a broad bandwidth. Pasternack's WR-112 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

### Configuration

Design	WR-112 Standard Gain Horn
Pattern	Directional
Polarization	Linear

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	7.05		10	GHz
Nominal Gain		10		dBi
Horizontal Half Power Beam Width		55.2		Degrees
Vertical Half Power Beam Width		56.8		Degrees

Electrical Specification Notes:  
Half power beam width is calculated by computer simulation.

### Mechanical Specifications

Size	
Length	2.55 in [64.77 mm]
Width	1.875 in [47.63 mm]
Height	1.875 in [47.63 mm]
Weight	0.186 lbs [84.37 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Waveguide Standard Gain Horn Antenna Operating from 7.05 GHz to 10 GHz with a Nominal 10 dBi Gain with Square Cover Flange PE9858-10](#)



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**Waveguide Interface**

Waveguide Size  
Flange Type  
Body Material and Plating

WR-112  
Square Cover  
Anodized Aluminum, Paint

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

WR-112 Waveguide Standard Gain Horn Antenna Operating from 7.05 GHz to 10 GHz with a Nominal 10 dBi Gain with Square Cover Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr112-pe9858-10-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE9858-10 CAD Drawing

WR-112 Waveguide Standard Gain Horn Antenna Operating from 7.05 GHz to 10 GHz with a Nominal 10 dBi Gain with Square Cover Flange

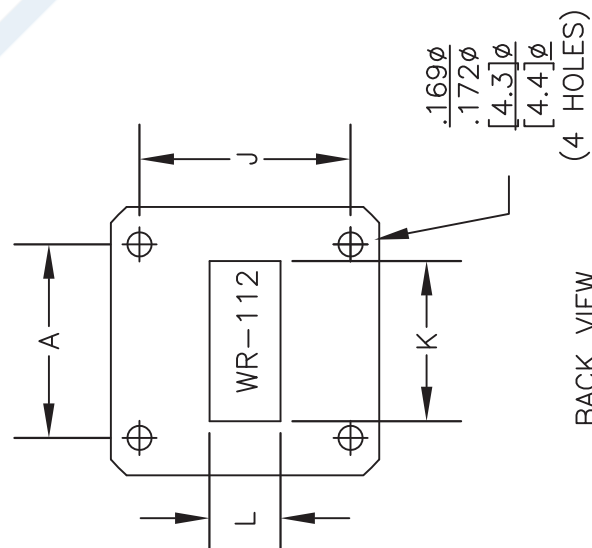
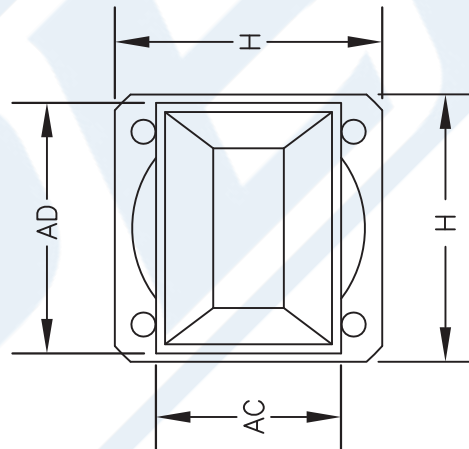
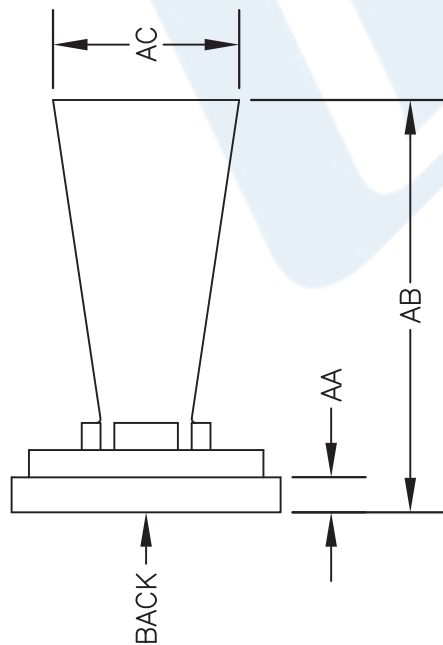
WR112		
Dimension	Inches	mm
A	1.352	34.34
H	1.875	47.63
J	1.474	37.44
K ( $\pm 0.004$ )	1.122	28.50
L ( $\pm 0.004$ )	0.497	12.62

AA	0.250	6.35
AB	2.550	64.77
AC	1.300	33.02
AD	1.750	44.45

## STANDARD TOLERANCES

.X  $\pm 0.2$   
.XX  $\pm 0.1$   
.XXX  $\pm 0.05$

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



DWG TITLE

**PE9858-10**

NOTES:  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].

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CAGE CODE 53919

CAD FILE 022317

SCALE N/A

SIZE A

2233