



WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 15 dBi Gain With UG-597/U Square Cover Flange

Gain Horns Technical Data Sheet

PE9852-15

Features

- Rectangular Waveguide Interface
- 18 GHz to 26.5 GHz
- 15 dBi Nominal Gain
- UG-597/U Square Cover Flange

Applications

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

Description

Pasternack's PE9852-15 WR-42 waveguide standard gain horn antenna operating from 18 GHz to 26.5 GHz with a nominal 15 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 UG-597/U square cover flange. The PE9852-15 WR-42 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 31.5 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-42 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

Configuration

Design	WR-42 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Nominal Gain		15		dBi
Horizontal Half Power Beam Width		31.5		Degrees
Vertical Half Power Beam Width		31.3		Degrees

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

Mechanical Specifications

Size	
Length	2.37 in [60.2 mm]
Width	1.22 in [30.99 mm]
Height	0.92 in [23.37 mm]
Weight	0.058 lbs [26.31 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 15 dBi Gain With UG-597/U Square Cover Flange PE9852-15](#)



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Waveguide Interface

Waveguide Size
Flange Type
Flange Designation
Body Material and Plating

WR-42
Square Cover
UG-597/U
Anodized Aluminum, Paint

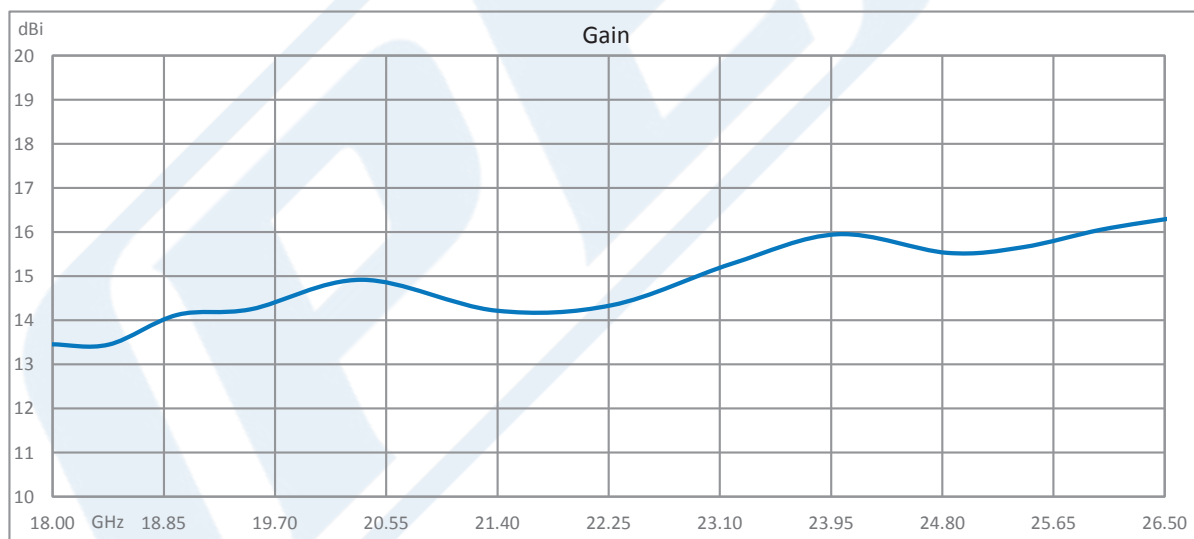
Environmental Specifications

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

Plotted and Other Data

Notes:

Typical Performance Data



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WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 15 dBi Gain With UG-597/U 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 15 dBi Gain With UG-597/U Square Cover Flange PE9852-15](https://www.pasternack.com/standard-gain-horn-waveguide-size-wr42-pe9852-15-p.aspx)

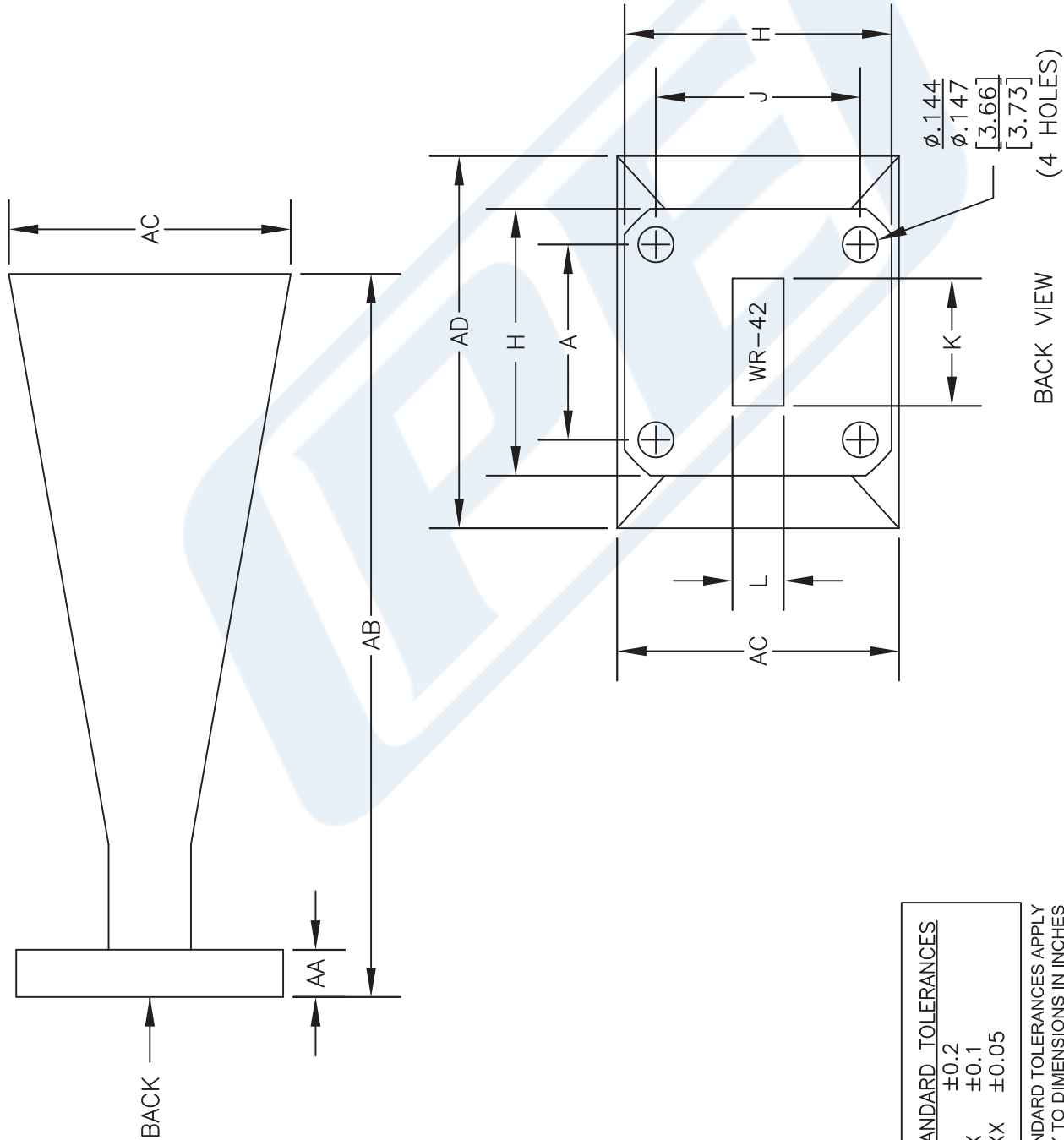
URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr42-pe9852-15-p.aspx>

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.

PE9852-15 CAD Drawing

WR-42 Waveguide Standard Gain Horn Antenna Operating From 18 GHz to 26.5 GHz With a Nominal 15 dBi Gain With UG-597/U Square Cover Flange

WR42	Dimension	Inches	mm
A		0.640	16.26
H		0.875	22.23
J		0.670	17.02
K (± 0.002)		0.420	10.67
L (± 0.002)		0.170	4.32
AA		0.160	4.06
AB		2.370	60.20
AC		0.920	23.37
AD		1.220	30.99



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].

DWG TITLE

PE9852-15

FSCM NO. 53919

41742

SIZE A

SCALE N/A

CAD FILE 112216

PE PASTERNAK
 THE ENGINEER'S RF SOURCE

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