



WR-42 Waveguide Standard Gain Horn Antenna  
 Operating from 18 GHz to 26.5 GHz with a  
 Nominal 20 dB Gain 2.92mm Female Input

Technical Data Sheet

PE9852B/2F-20

**Features**

- WR-42 Rectangular Waveguide Interface
- 18 GHz to 26.5 GHz
- 20 dBi Nominal Gain
- 2.92mm Female Connector

**Applications**

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

**Description**

The Proline series PE9852B/2F-20 standard gain horn antenna (also known as waveguide horn) from Pasternack is part of our huge selection of waveguide antennas. This Pasternack standard gain horn antenna is manufactured with a WR-42 input and a waveguide to coaxial transition adapter. Our WR-42 standard gain horn antenna has a nominal gain of 20 dBi. This WR-42 standard gain horn has a 2.92mm waveguide to coax transition adapter that is female gender.

The Pasternack 20 dBi WR-42 horn antenna operates from 18 GHz to 26.5 GHz. The WR-42 PE9852B/2F-20 waveguide horn is US made and TAA compliant. It is part of over 40,000 RF, microwave and millimeter wave components available from Pasternack. Waveguide standard gain horn antennas, such as the PE9852B/2F-20, are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance. Pasternack's 2.92mm female WR-42 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-42 standard gain horn Proline antennas with 2.92mm female interface can ship worldwide the same day as it is purchased as with our other available RF parts.

**Configuration**

Design	WR-42 Standard Gain Horn
Pattern	Directional
Polarization	Linear
Coaxial Interface	2.92mm Female

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Impedance		50		Ohms
<b>Waveguide Standard Gain Horn</b>				
Gain		20		dB
Horizontal Half Power Beam Width		17.8		Degrees
Vertical Half Power Beam Width		17.5		Degrees
<b>Waveguide to Coaxial Adapter</b>				
Input VSWR		1.4:1		

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 20 dB Gain 2.92mm Female Input PE9852B/2F-20](#)



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### Mechanical Specifications

#### Size

Weight 0.33 lbs [149.69 g]

#### RF Connector

Type 2.92mm Female

#### Waveguide Interface

Waveguide Size WR-42  
Body Material and Plating Aluminum

### Environmental Specifications

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

### Plotted and Other Data

2 Dimensional OML Drawing PE9852B/2F-20  
Notes:

WR-42 Waveguide Standard Gain Horn Antenna Operating from 18 GHz to 26.5 GHz with a Nominal 20 dB Gain 2.92mm Female Input 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 20 dB Gain 2.92mm Female Input PE9852B/2F-20](#)

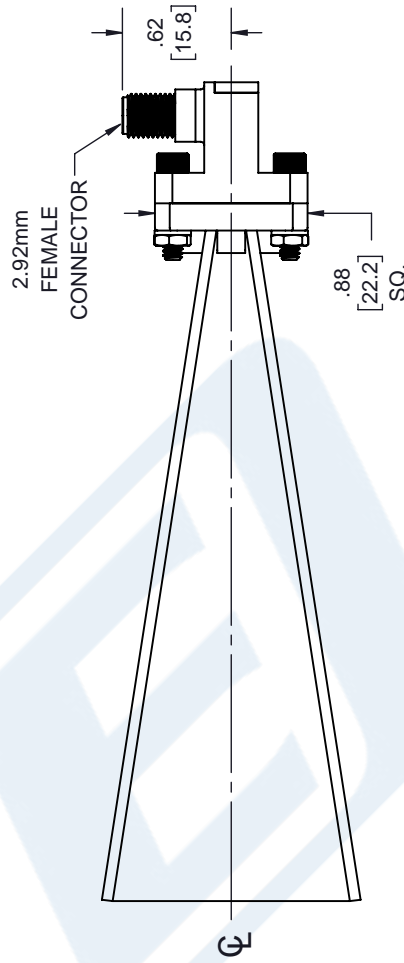
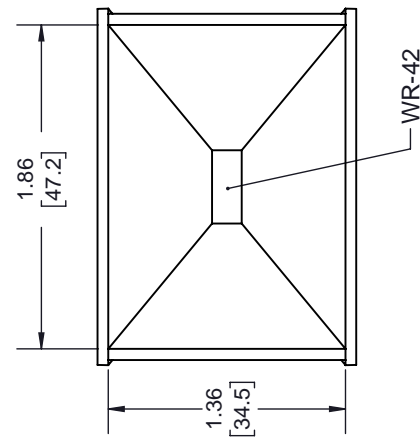
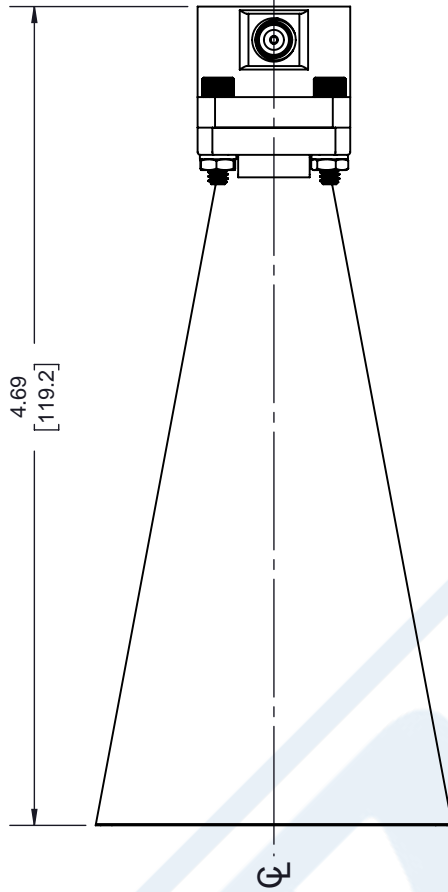
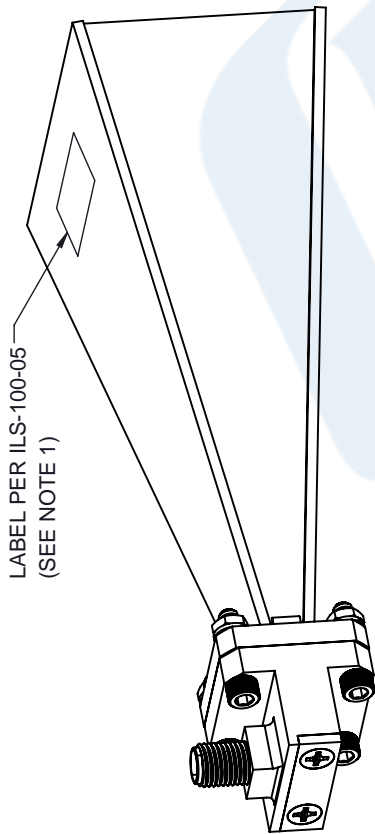
URL: <https://www.pasternack.com/wr-42-waveguide-standard-gain-horn-antenna-20-db-2.92mm-pe9852b-2f-20-p.aspx>

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# PE9852B/2F-20 CAD Drawing

WR-42 Waveguide Standard Gain Horn Antenna Operating from 18 GHz to 26.5 GHz with a Nominal 20 dB Gain 2.92mm Female Input

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/16/2020	KHIETPAS



UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08]    FRACTIONS ± 1/32  
 .XX = ±.02 [.51]    ANGLES ± 1°  
 .XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITE brand

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SIZE A    CAGE CODE 53919    DRAWN BY BPUCHASKI    ITEM NO. PE9852B/2F-20

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

- NOTES:  
1. LABEL PER ILS-100-05 (FOR INTERNAL REFERENCE ONLY)  
LABEL LOCATION FOR REFERENCE ONLY

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