



WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange

Waveguide Antennas Technical Data Sheet

PE9853B-10

Features

- WR-51 Rectangular Waveguide Interface
- 15 GHz to 22 GHz
- 10 dBi Nominal Gain
- square Cover Flange

Applications

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

Description

The PE9853B-10 WR-51 Proline series standard gain horn antenna (also known as waveguide horn) from Pasternack has a nominal gain of 10 dBi. This WR-51 standard gain horn has a square type flange. The Pasternack 10 dBi WR-51 horn antenna operates from 15 GHz to 22 GHz. The WR-51 PE9853B-10 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 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 WR-51 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and rectangular input. Our WR-51 standard gain horn Proline antennas can ship worldwide the same day as it is purchased as with our other available RF parts.

Configuration

Design	WR-51 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
Impedance		50		Ohms
Nominal Gain		10		dB
VSWR		1.5:1		

Mechanical Specifications

Size	
Length	1.42 in [36.07 mm]
Width	1.312 in [33.32 mm]
Height	1.312 in [33.32 mm]

Waveguide Interface

Waveguide Size	WR-51
Flange Type	Square Cover

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange PE9853B-10](#)



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Body Material and Plating

Aluminum

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

Plotted and Other Data

WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange PE9853B-10](#)

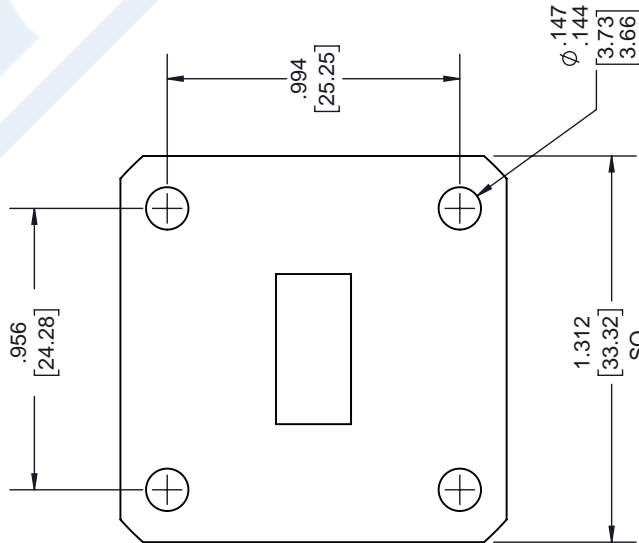
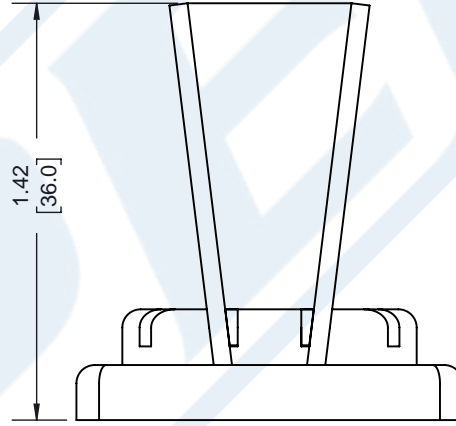
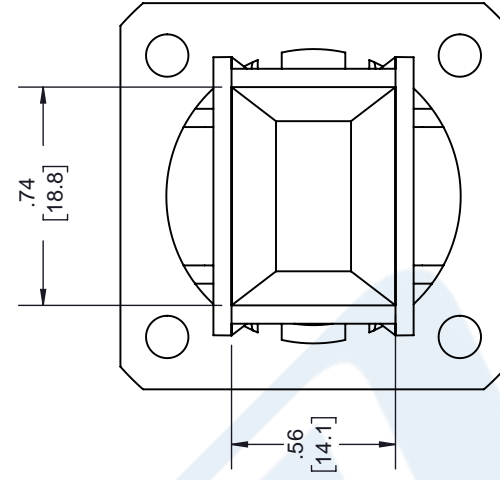
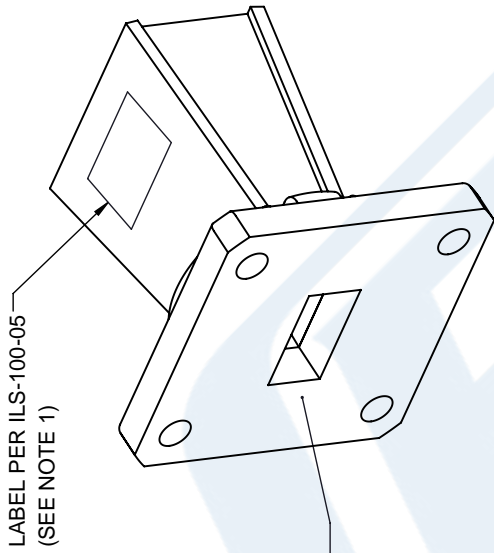
URL: <https://www.pasternack.com/wr-51-waveguide-gain-horn-antenna-10db-square-flange-pe9853b-10-p.aspx>

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.

PE9853B-10 CAD Drawing

WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	11/03/2020
		APPROVED
		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.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PE9853B-10

DRAWN BY BPUCHASKI

SIZE A

CAGE CODE 53919

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