



WR-51 Waveguide Standard Gain Horn Antenna Operating From 15 GHz to 22 GHz With a Nominal 15 dBi Gain With Square Cover Flange

Gain Horns Technical Data Sheet

PE9853-15

Features

- Rectangular Waveguide Interface
- 15 GHz to 22 GHz
- 15 dBi Nominal Gain
- Square Cover Flange

Applications

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

Description

Pasternack's PE9853-15 WR-51 waveguide standard gain horn antenna operating from 15 GHz to 22 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 square cover flange. The PE9853-15 WR-51 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 32 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-51 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

Configuration

Design	WR-51 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
Nominal Gain		15		dBi
Horizontal Half Power Beam Width		31.8		Degrees
Vertical Half Power Beam Width		32		Degrees

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

Mechanical Specifications

Size	
Length	2.84 in [72.14 mm]
Width	2.25 in [57.15 mm]
Height	1.31 in [33.27 mm]
Weight	0.11 lbs [49.9 g]

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 15 dBi Gain With Square Cover Flange PE9853-15](#)



WR-51 Waveguide Standard Gain Horn Antenna
Operating From 15 GHz to 22 GHz With a Nominal
15 dBi Gain With Square Cover Flange

Gain Horns Technical Data Sheet

PE9853-15

Waveguide Interface

Waveguide Size

WR-51

Flange Type

Square Cover

Body Material and Plating

Anodized Aluminum, Paint

Environmental Specifications

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

Plotted and Other Data

Notes:

WR-51 Waveguide Standard Gain Horn Antenna Operating From 15 GHz to 22 GHz With a Nominal 15 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 15 dBi Gain With Square Cover Flange PE9853-15](#)

URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr51-pe9853-15-p.aspx>

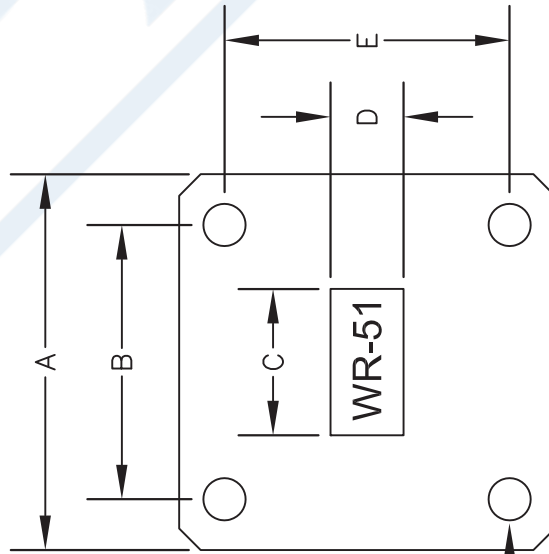
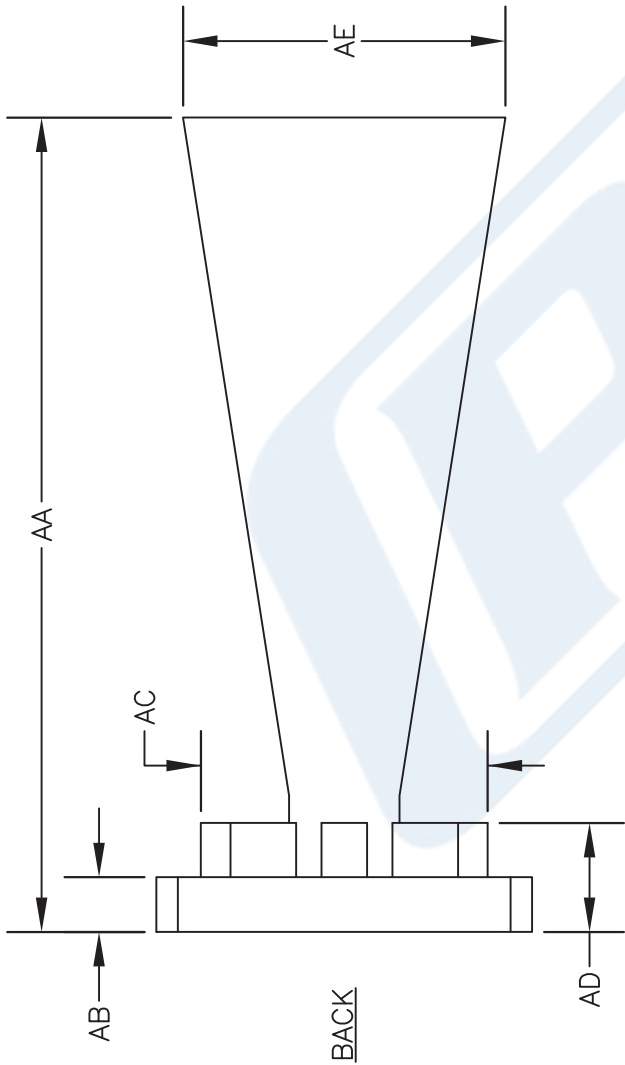
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

PE9853-15 CAD Drawing

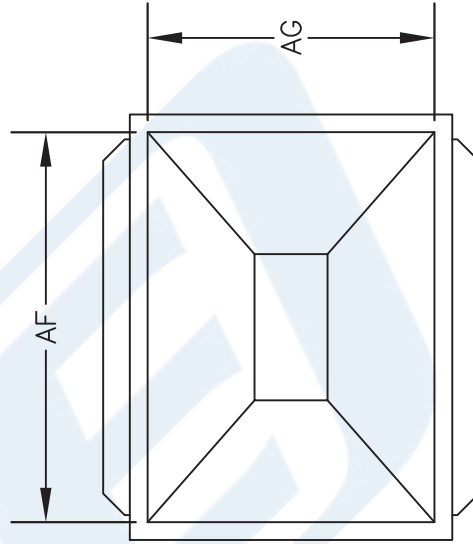
WR-51 Waveguide Standard Gain Horn Antenna Operating From 15 GHz to 22 GHz With a Nominal 15 dBi Gain With Square Cover Flange

WR51	Dimension	Inches	mm
A (SQ.)		1.310	33.27
B		0.956	24.28
C (± 0.005)		0.510	12.95
D (± 0.005)		0.255	6.48
E		0.994	25.25

AA		2.840	72.14
AB		0.191	4.85
AC (DIA.)		1.000	25.40
AD		0.380	9.65
AE		1.124	28.55
AF		1.360	34.54
AG		1.000	25.40



BACK VIEW



FRONT VIEW

DWG TITLE

PE9853-15

- 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].

PE PASTERNAK
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

FSCM NO. 53919

CAD FILE 011516

SCALE N/A

SIZE A

2233