

WR-51 Standard Gain Horn with 20 dBi gain,  
End Launch SMA Female connector

## Technical Data Sheet

**PEWAN051-20ELSF**

### Features

- 15 GHz to 22 GHz
- WR-51 Waveguide Band
- 20 dBi Nominal Gain
- SMA Female End Launch Connector

### Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems
- Radome Testing
- Automotive Antenna Test
- Solutions
- Radar Cross Section
- Satellite Antenna Testing

### Description

The PEWAN051-20ELSF standard gain horn antenna (also known as waveguide horn) from Pasternack is part of our comprehensive selection of waveguide antennas. This standard gain horn is mated with a WR-51 to SMA Female End Launch waveguide to coaxial adapter and operates from 15 GHz to 22 GHz.

Our PEWAN051-20ELSF standard gain horn antenna has a nominal gain of 20 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 17.5 dB and 17.3 dB respectively. Pasternack's SMA Female End Launch to WR-51 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PEWAN051-20ELSF are used in a wide variety of applications due to the high-power handling capability, low loss, high directivity, and near constant electrical performance. Our WR-51 waveguide antennas with SMA Female End Launch interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and Ship same day.

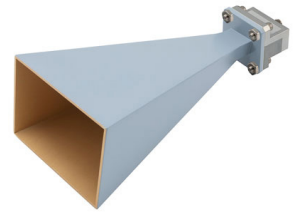
### Configuration

Design: WR-51 Standard Gain Horn  
Coaxial Interface: SMA Female

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
<b>Waveguide Standard Gain Horn</b>				
Gain		20		dBi
Horizontal Half Power Beam Width		17.5		Degrees
Vertical Half Power Beam Width		17.3		Degrees
<b>Waveguide to Coaxial Adapter</b>				
Input VSWR			1.3:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN051-20ELSF](#)



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### Mechanical Specifications

#### Size

Length	6.512 in [165.4 mm]
Width	2.493 in [63.32 mm]
Height	1.85 in [46.99 mm]
Weight	0.371 lbs [168.28 g]

#### RF Connector

Type	SMA Female
Specification	End Launch

#### Waveguide Interface

Waveguide Size	WR-51
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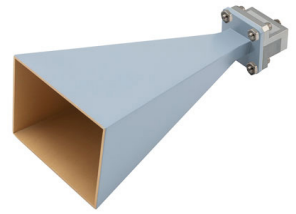
### Environmental Specifications

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN051-20ELSF](#)

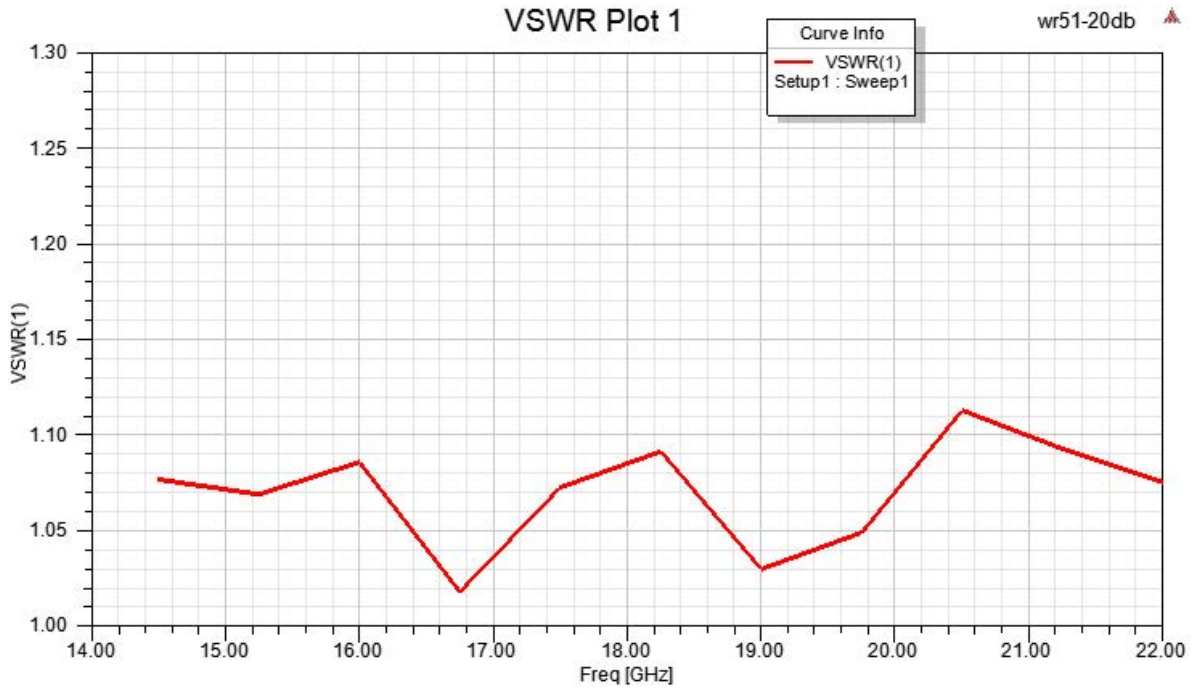


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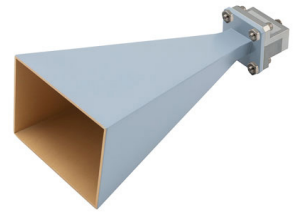
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Typical Performance Data



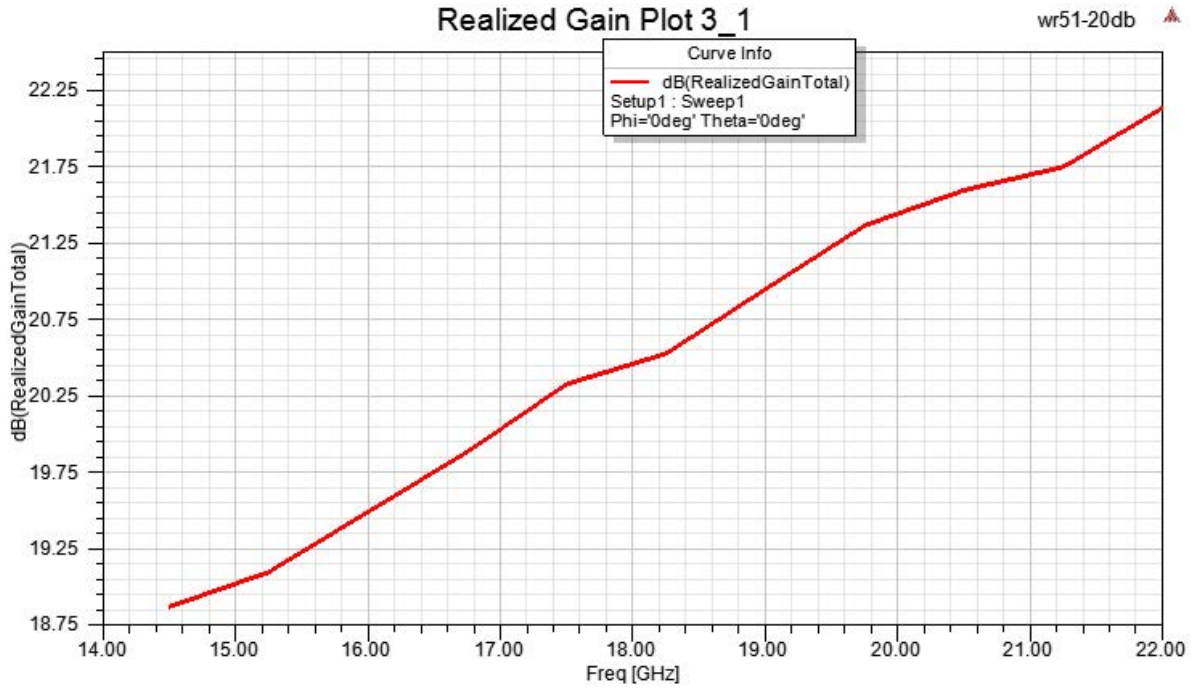
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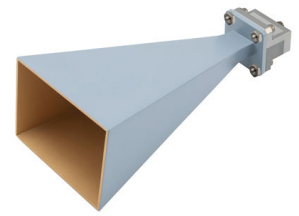
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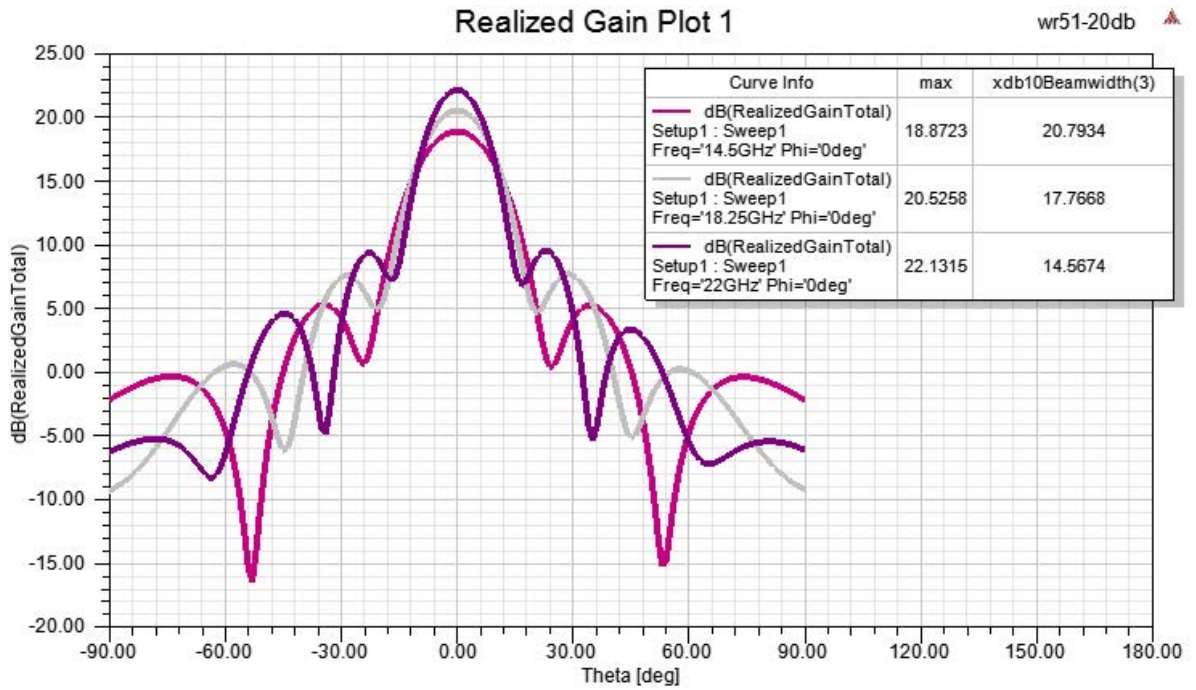
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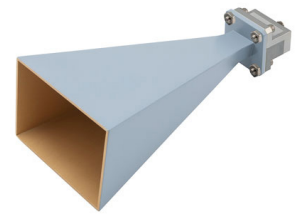
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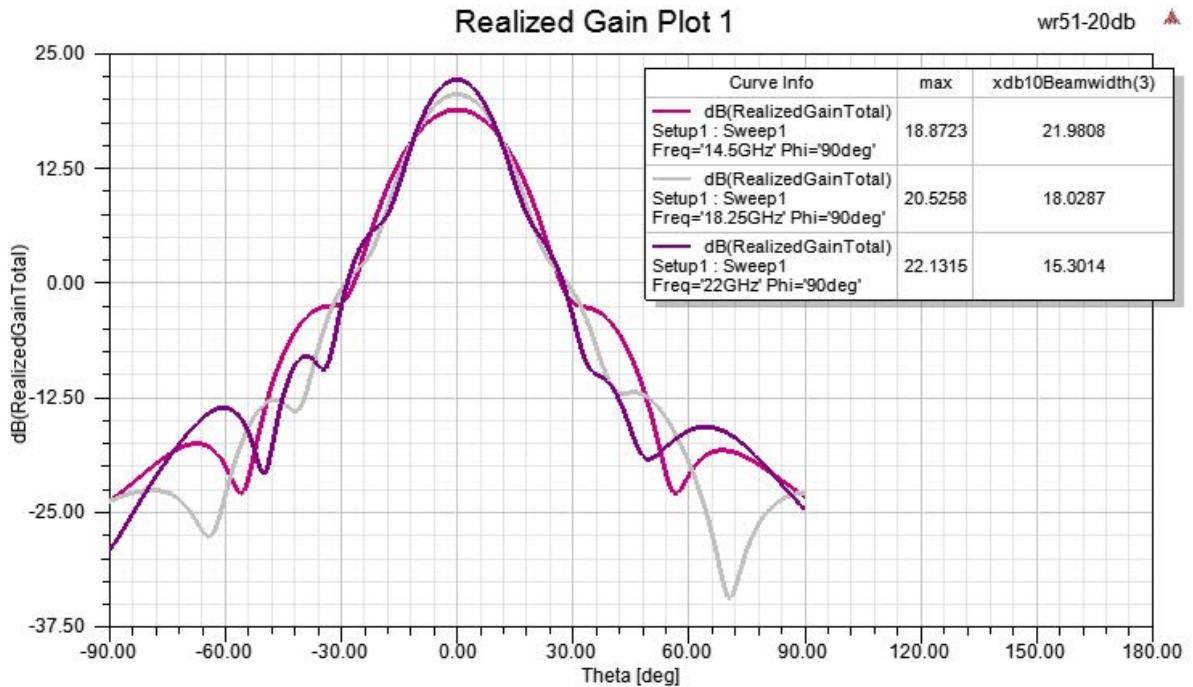
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WR-51 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are 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 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector PEWAN051-20ELSF](#)

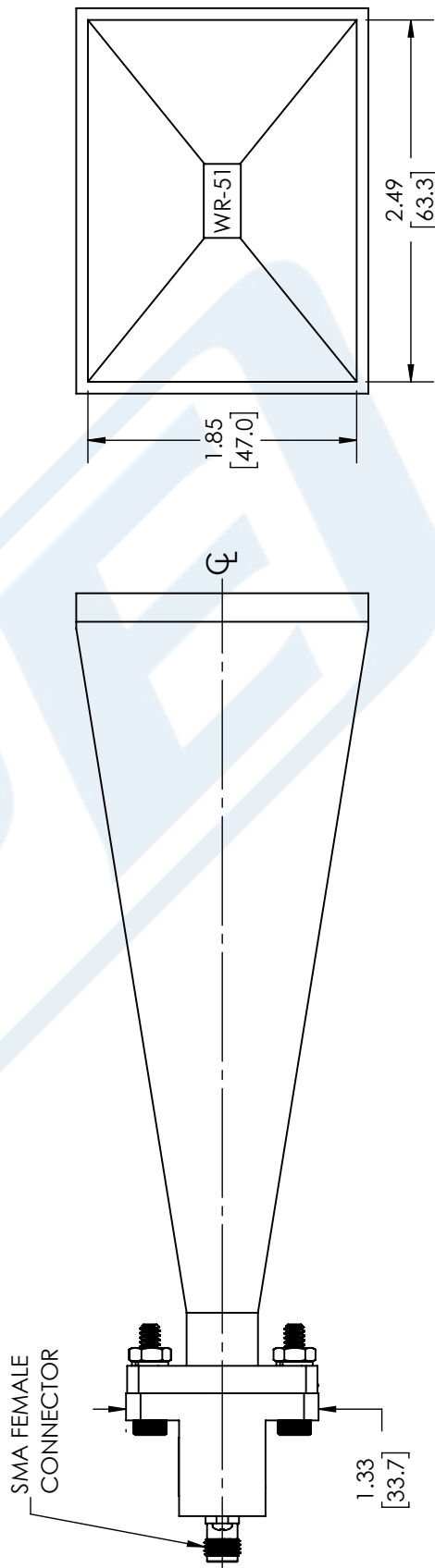
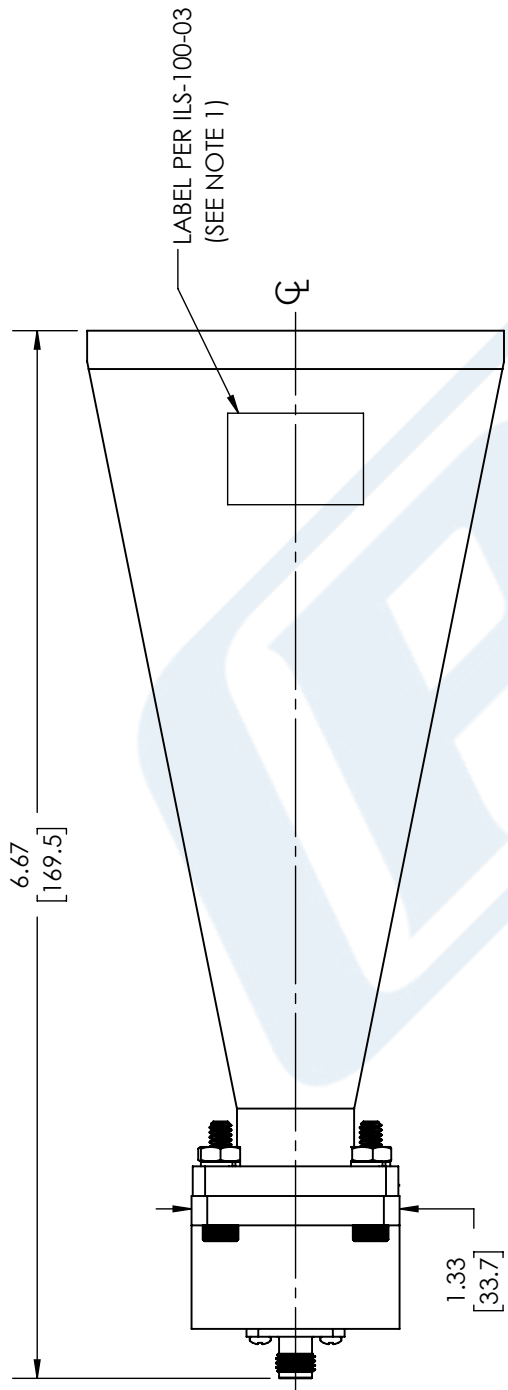
URL:

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# PEWAN051-20ELSF CAD Drawing

WR-51 Standard Gain Horn with 20 dBi gain, End Launch SMA Female connector

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/04/2021	KHIETPAS



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

TOLERANCES:

.X = ±.2	[.508]	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 INFINITI brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	BPUCHASKI	PEWAN051-20ELSF
REV	A		

**NOTES:**

1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)

LABEL LOCATION FOR REFERENCE ONLY

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