



WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector

Technical Data Sheet

PEWAN090-10SM

Features

- 8.2 GHz to 12.4 GHz
- WR-90 Waveguide Band
- 10 dBi Nominal Gain
- SMA Male 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 PEWAN090-10SM 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-90 to SMA Male waveguide to coaxial adapter and operates from 8.2 GHz to 12.4 GHz.

Our PEWAN090-10SM standard gain horn antenna has a nominal gain of 10 dBi with a Horizontal and Vertical HPBW (Half Power Beam Width) of 52.1 dB and 51.6 dB respectively. Pasternack's SMA Male to WR-90 standard gain horns are available in 10, 15 and 20 dBi models with pyramidal shape and connectorized input.

Waveguide antennas, such as the PEWAN090-10SM 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-90 waveguide antennas with SMA Male interface is part of over 40,000 RF, microwave and millimeter wave components from Pasternack available worldwide and Ship same day.

Configuration

Design: WR-90 Standard Gain Horn
Coaxial Interface: SMA Male

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
Waveguide Standard Gain Horn				
Gain		10		dBi
Horizontal Half Power Beam Width		52.1		Degrees
Vertical Half Power Beam Width		51.6		Degrees
Waveguide to Coaxial Adapter				
Input VSWR			1.25:1	

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector PEWAN090-10SM](#)



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Mechanical Specifications

Size

Length	3.351 in [85.12 mm]
Width	1.63 in [41.4 mm]
Height	1.63 in [41.4 mm]
Weight	0.1 lbs [45.36 g]

RF Connector

Type	SMA Male
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Waveguide Interface

Waveguide Size	WR-90
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Environmental Specifications

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

Plotted and Other Data

Notes:

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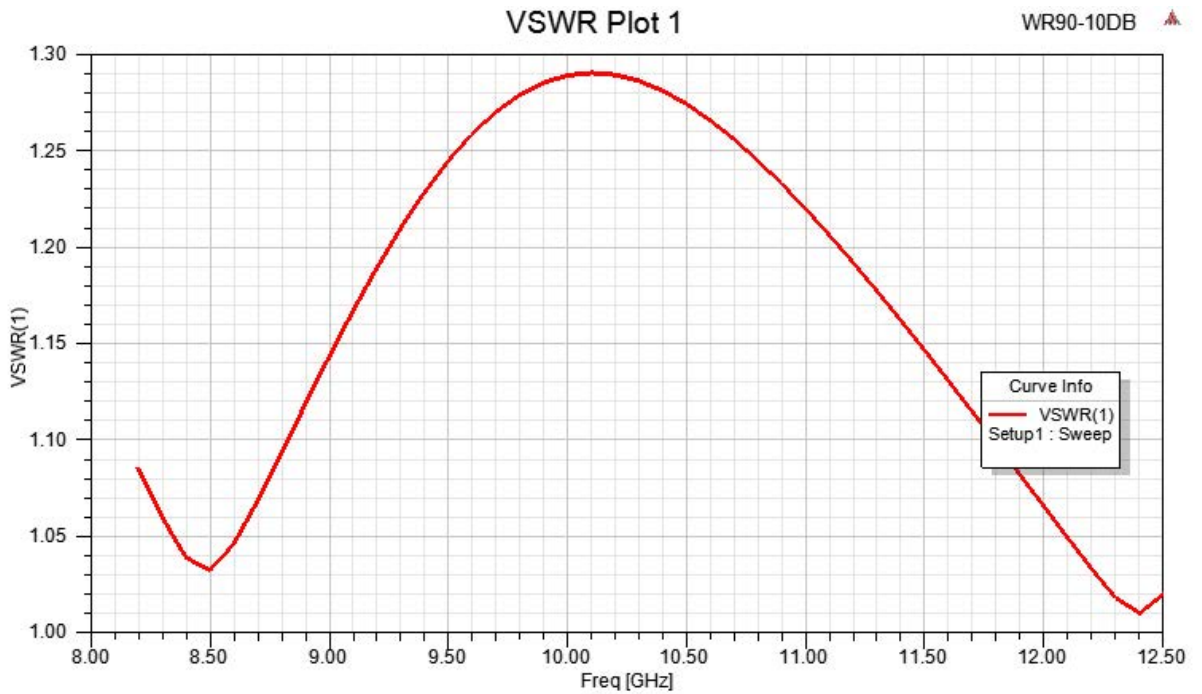


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Typical Performance Data



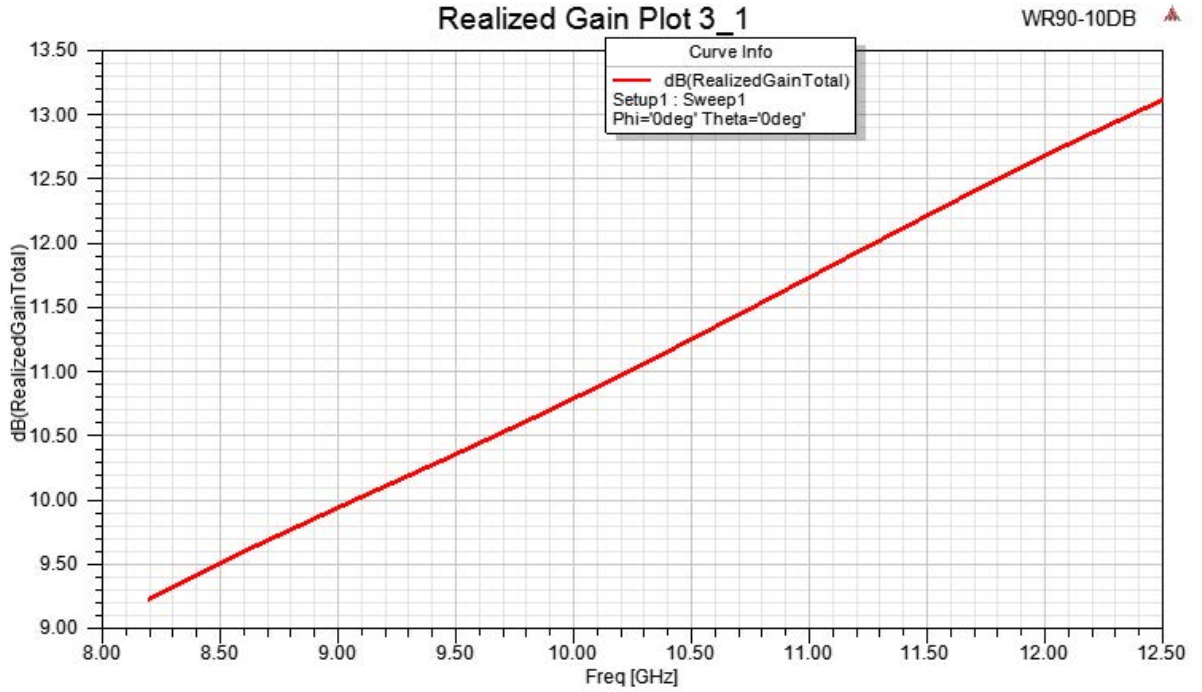
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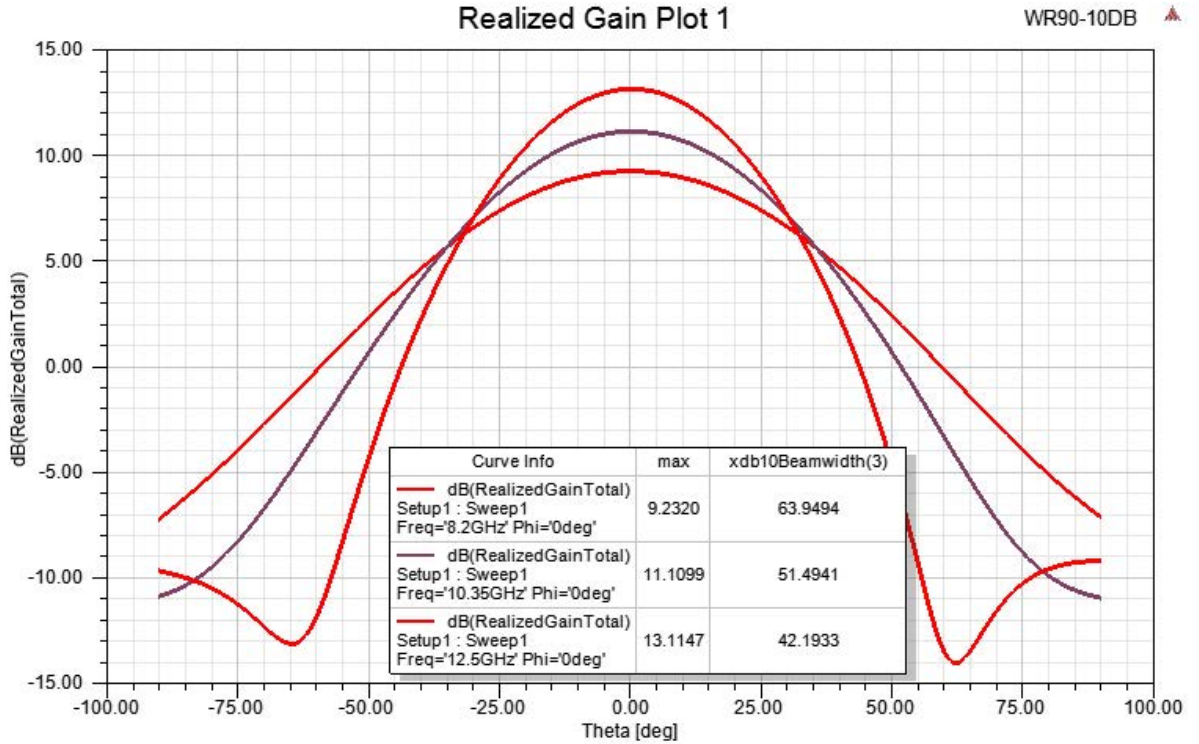
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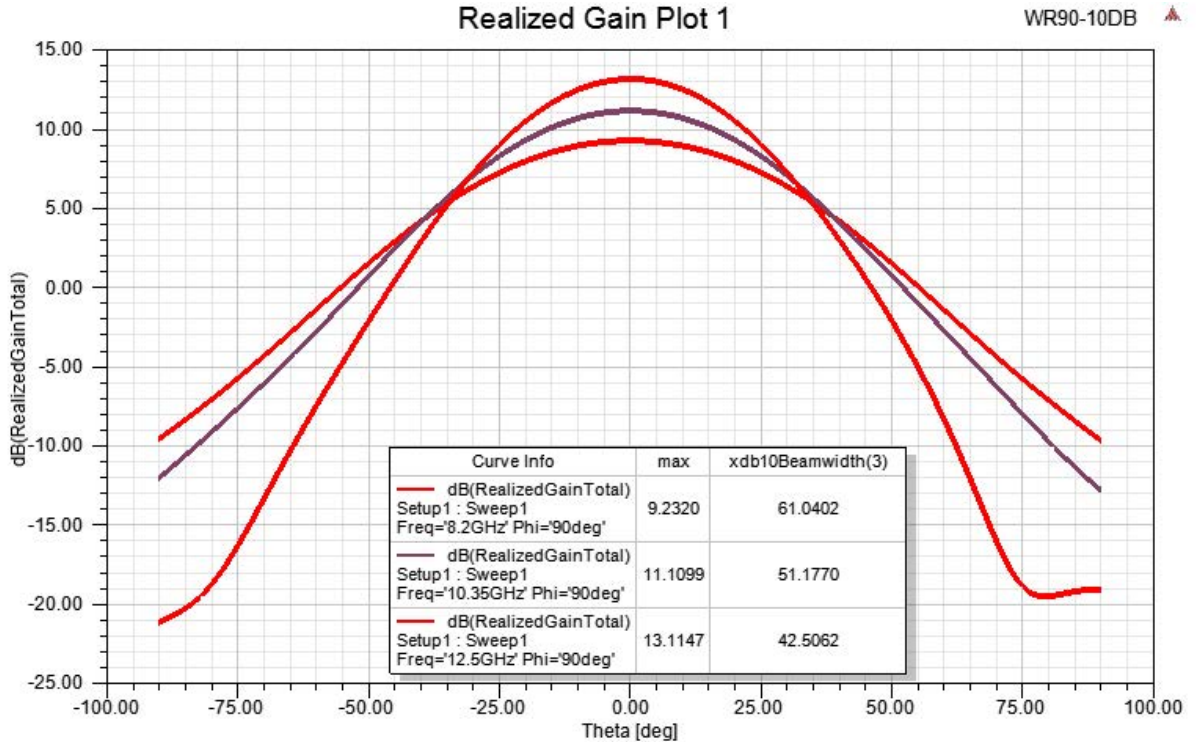
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WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the 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-90 Standard Gain Horn with 10 dBi gain, SMA Male connector PEWAN090-10SM](#)

URL:

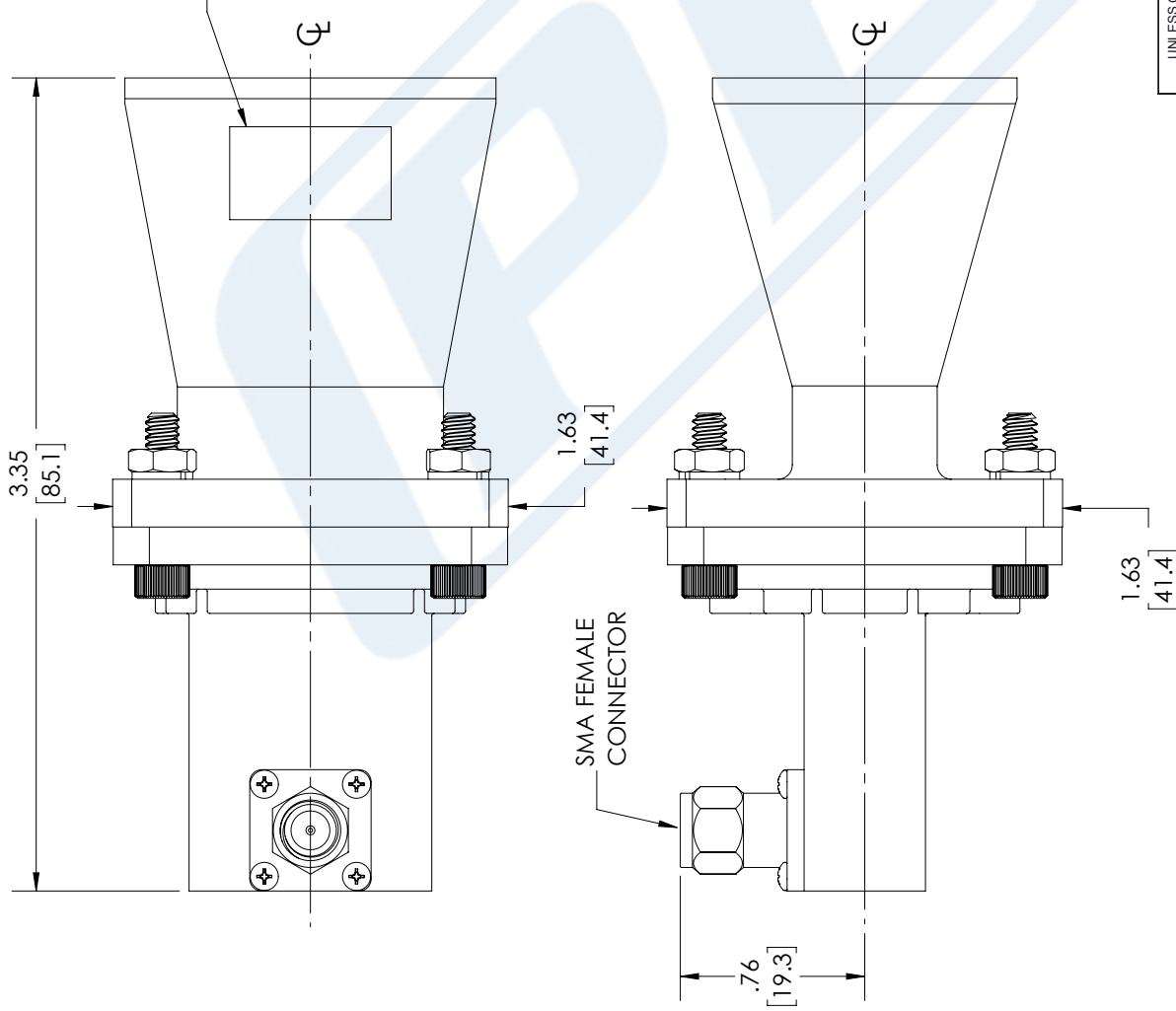
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PEWAN090-10SM CAD Drawing

WR-90 Standard Gain Horn with 10 dBi gain, SMA Male connector

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

LABEL PER ILS-100-05
(SEE NOTE 1)



PE PASTERNAK
an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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

TOLERANCES:

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

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%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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

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