



WR-12 Waveguide Conical Gain Horn Antenna

Operating from 77 GHz to 87 GHz with a Nominal
10 dBi Gain with UG-387/U Round Cover Flange

Gain Horns Technical Data Sheet

PEWAN1045

Features

- Circular Waveguide Interface
- 77 GHz to 87 GHz
- 10 dBi Nominal Gain
- UG-387/U Round Cover Flange

Applications

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

Description

Waveguide conical 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 PEWAN1045 WR-12 waveguide conical gain horn antenna operating from 77 GHz to 87 GHz with a nominal 10 dBi gain is part of our full line of RF components available for same-day shipping. This Pasternack circular horn antenna has a gold plated brass body and a precision tolerance UG-387/U round cover flange. The PEWAN1045 WR-12 waveguide conical gain horn antenna offers low gain variation across its operating frequency range.

Configuration

| | |
|--------------|-------------------------|
| Design | WR-12 Conical Gain Horn |
| Pattern | Directional |
| Polarization | Linear |

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|----------------------------------|---------|---------|---------|---------|
| Frequency Range | 77 | | 87 | GHz |
| Nominal Gain | | 10 | | dBi |
| Horizontal Half Power Beam Width | | 58 | | Degrees |
| Vertical Half Power Beam Width | | 53 | | Degrees |
| VSWR | | 1.15:1 | | |

Mechanical Specifications

| | |
|-------------|---------------------|
| Size | |
| Length | 1.16 in [29.46 mm] |
| Width | 0.75 in [19.05 mm] |
| Height | 0.75 in [19.05 mm] |
| Weight | 0.032 lbs [14.51 g] |

Waveguide Interface

| | |
|--------------------|-------------|
| Waveguide Size | WR-12 |
| Flange Type | Round Cover |
| Flange Designation | UG-387/U |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 10 dBi Gain with UG-387/U Round Cover Flange PEWAN1045](#)



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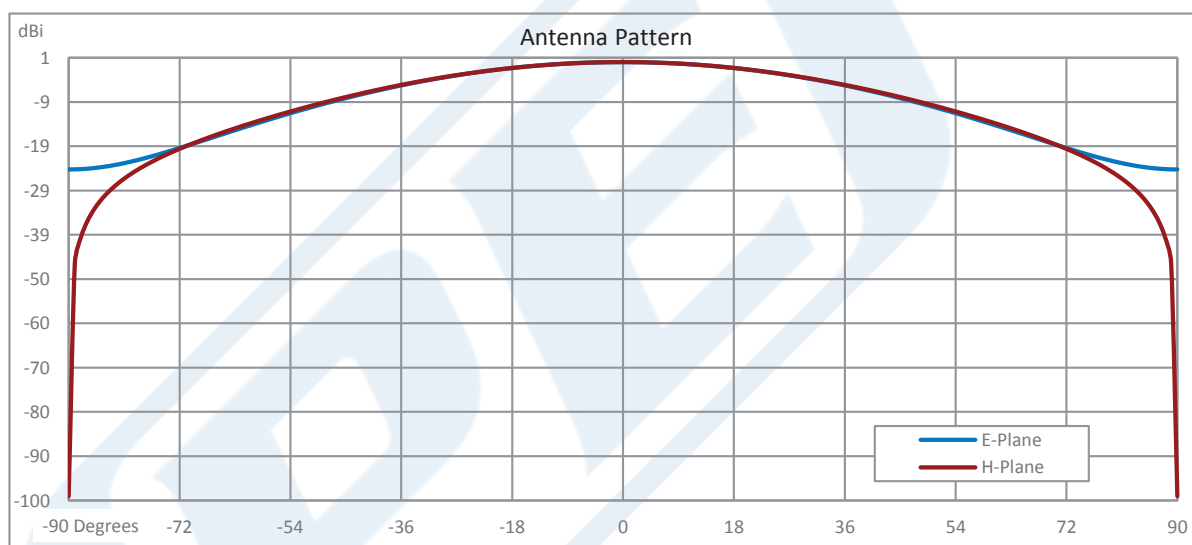
Body Material and Plating

Brass, Gold

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

Plotted and Other Data

Typical Performance Data



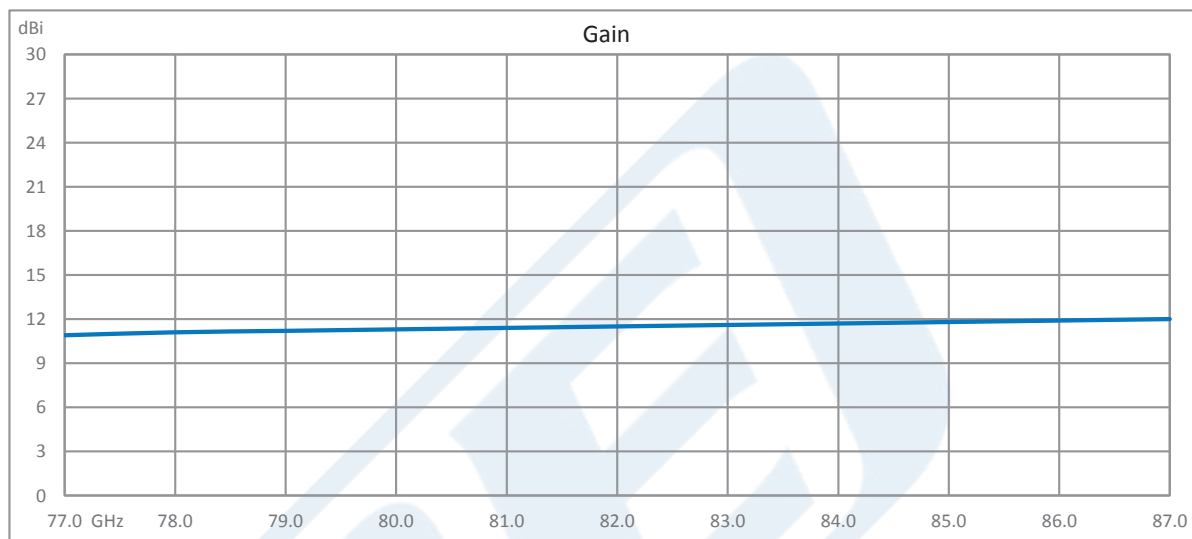
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WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 10 dBi Gain with UG-387/U Round Cover Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter 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-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 10 dBi Gain with UG-387/U Round Cover Flange PEWAN1045](https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-10dbi-ug-387-round-flange-pewan1045-p.aspx)

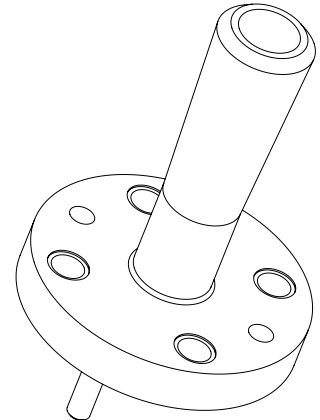
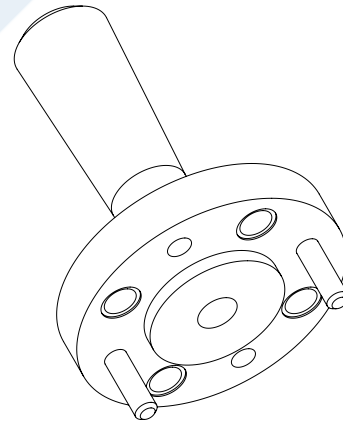
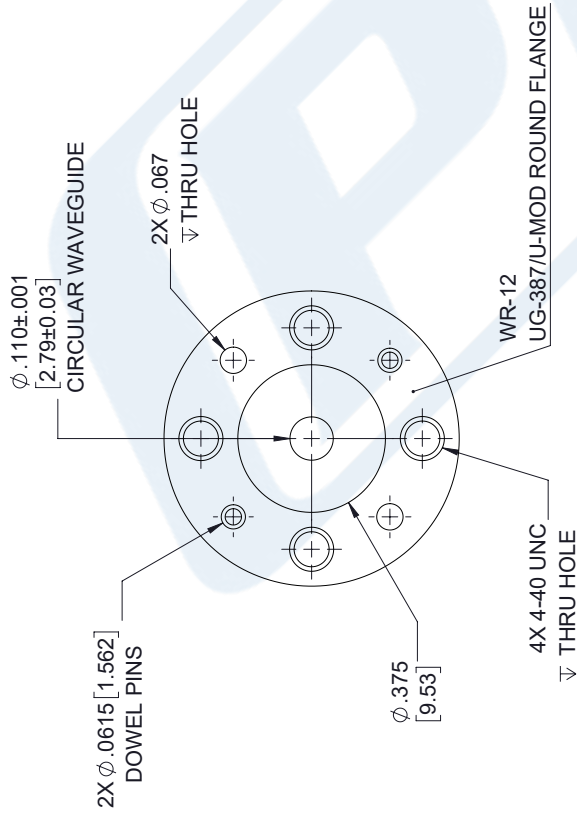
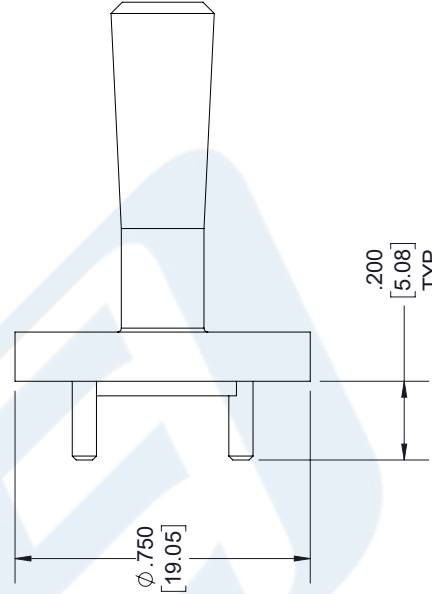
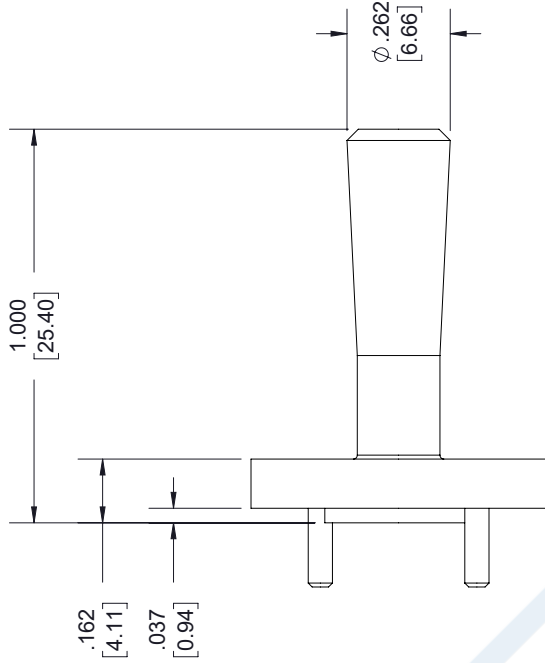
URL: <https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-10dbi-ug-387-round-flange-pewan1045-p.aspx>

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PEWAN1045 CAD Drawing

WR-12 Waveguide Conical Gain Horn Antenna Operating from 77 GHz to 87 GHz with a Nominal 10 dBi Gain with UG-387/U Round Cover Flange

| REVISIONS | | | |
|-----------|-----------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 02/21/19 | M.MILLER |



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| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | FRACTIONS |
| X ± .001 | ± .001 |
| XX ± .005 | ± .005 |
| XXX ± .010 | ± .010 |
| ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. | ANGLES ± 1° |
| THIRD-ANGLE PROJECTION | |

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| SIZE | CAGE |
| A | 53919 |
| DRAWN BY | K.DANG |
| PART NUMBER | PEWAN1045 |
| REV | A |

| | |
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| SHEET | 1 OF 1 |
| SCALE | N/A |

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