



# WR-15 UG-385/U Round Cover Flange to 1.85mm Female Waveguide to Coax Adapter Operating from 50 GHz to 65 GHz

## Waveguide to Coax Adapters Technical Data Sheet

PE-W15CA001

### Features

- V Band, 50 to 65 GHz Frequency Range
- WR-15 Waveguide Interface with Precision Tolerance UG-385/U Flange
- 1.85 mm Female RF Interface
- Comprehensive waveguide offerings also include E-Bends, H-Bends, Sections, Filters, Terminations, Couplers, and more.

### Description

The PE-W15CA001 is a waveguide to coaxial adapter operating in the V Band with a 50 to 65 GHz frequency range. This adapter offers a WR-15 waveguide interface size coupled with a precision tolerance UG-385/U flange. The PE-W15CA001 is constructed of aluminum and plated in gold to ensure durability and repeatable RF performance. The coaxial connector offered by this adapter uses a 1.85mm geometry endorsed by the International Electrotechnical Commission (IEC).

### Configuration

|                |                      |
|----------------|----------------------|
| Waveguide Size | WR-15                |
| Flange         | UG-385/U Round Cover |
| RF Connector   | 1.85mm Female        |
| Impedance      | 50 Ohms              |
| Body Geometry  | Right Angle          |

### Electrical Specifications

| Description     | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | 50      |         | 65      | GHz   |
| VSWR            |         |         | 1.44:1  |       |
| Insertion Loss  |         |         | 0.5     | dB    |

### Mechanical Specifications

|             |                      |
|-------------|----------------------|
| <b>Size</b> |                      |
| Length      | 1.05 in [26.67 mm]   |
| Width       | 0.75 in [19.05 mm]   |
| Height      | 0.905 in [22.99 mm]  |
| Weight      | 0.0305 lbs [13.83 g] |

|                           |                 |
|---------------------------|-----------------|
| <b>RF Connector</b>       |                 |
| Connector Type            | 1.85mm Female   |
| Body Material and Plating | Stainless Steel |

|                            |             |
|----------------------------|-------------|
| <b>Waveguide Interface</b> |             |
| Waveguide Type             | WR-15       |
| Flange Type                | Round Cover |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-15 UG-385/U Round Cover Flange to 1.85mm Female Waveguide to Coax Adapter Operating from 50 GHz to 65 GHz PE-W15CA001](#)



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|                           |                |
|---------------------------|----------------|
| Flange Designation        | UG-385/U       |
| Body Material and Plating | Aluminum, Gold |
| Plating Specification     | ASTMB488       |

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level unless stated otherwise

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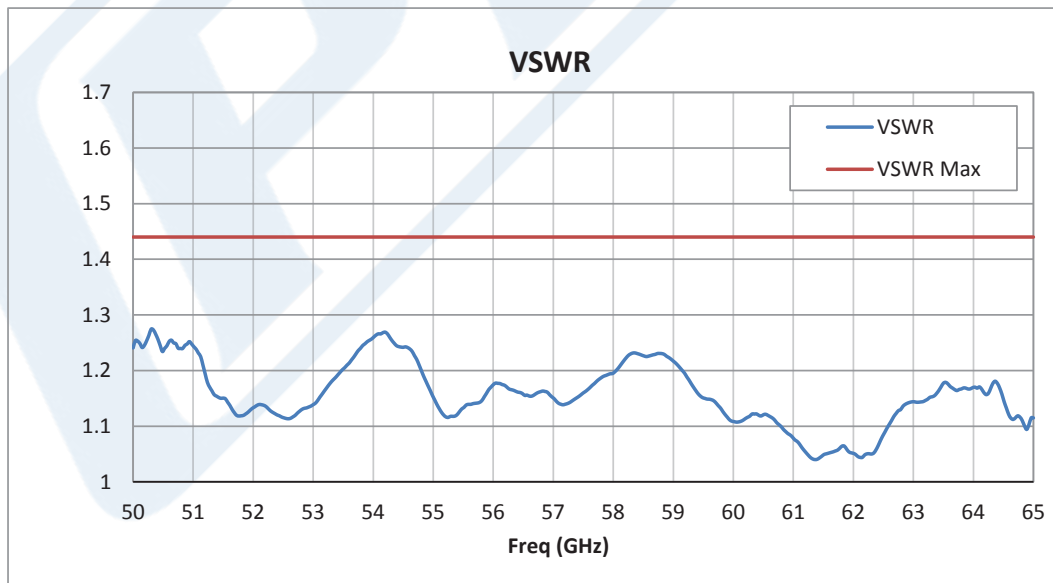
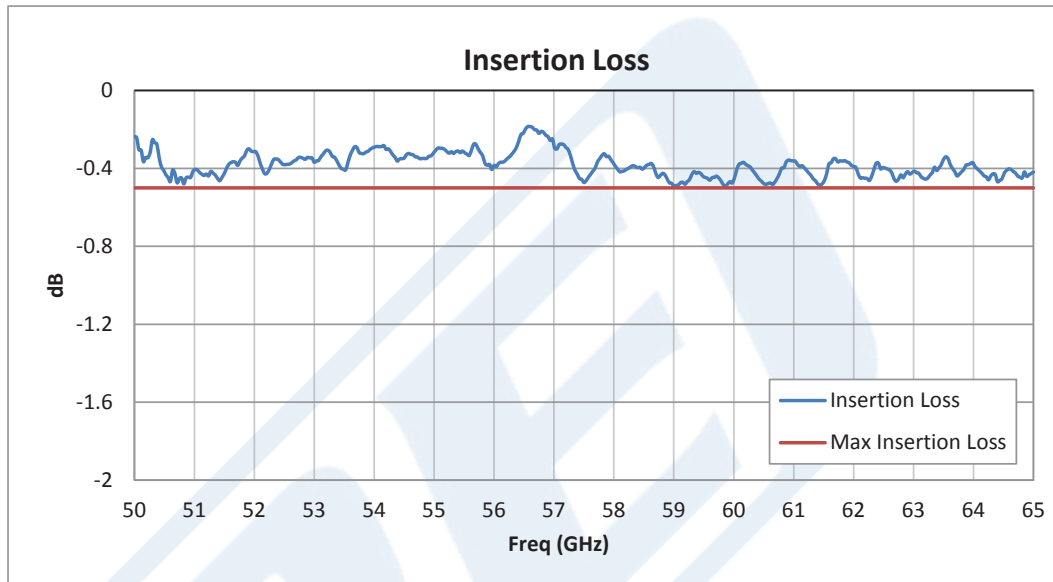


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Typical Performance Data



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WR-15 UG-385/U Round Cover Flange to 1.85mm Female Waveguide to Coax Adapter Operating from 50 GHz to 65 GHz 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.

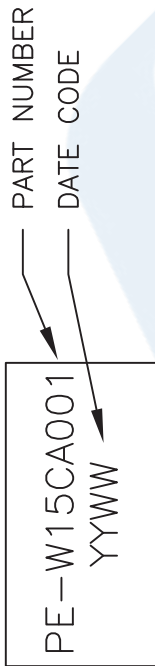
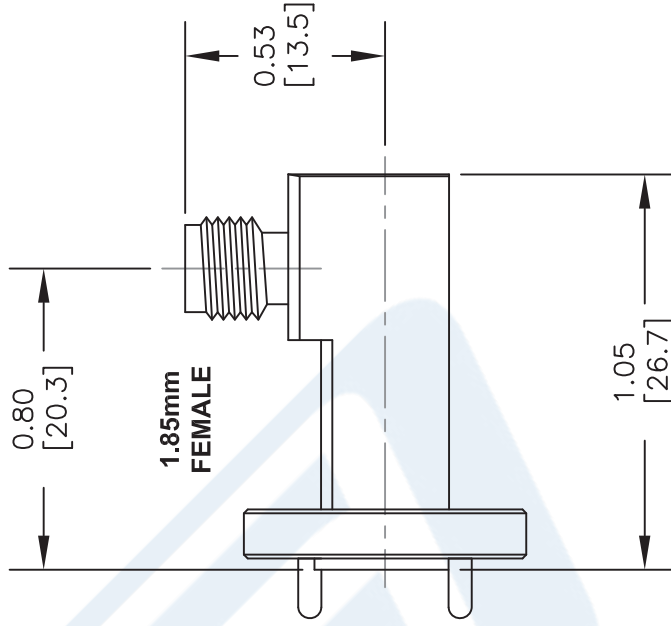
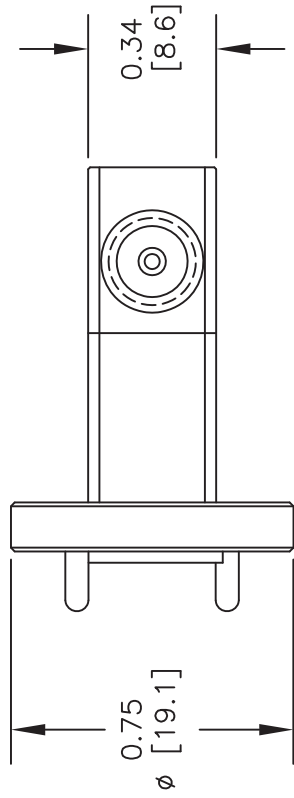
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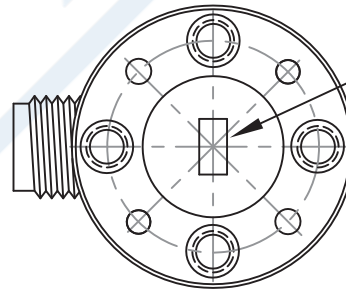
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# PE-W15CA001 CAD Drawing

WR-15 UG-385/U Round Cover Flange to 1.85mm Female Waveguide to Coax Adapter Operating from 50 GHz to 65 GHz



LABEL



WR-15 WAVEGUIDE  
W/UG-385/U  
FLANGE

| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: |                 | TOLERANCE |  |
|--|-----------------|-----------|--|
| DECIMALS   | ANGLES          | FRACTIONS |  |
| .XX ±.01   | ± 1/2°          | ± 1/64    |  |
| .XXX ±.005   |                 |           |  |
| HOLE DIAMETER  | TOLERANCE       |           |  |
| .0135 TO .125  | + .004 / - .001 |           |  |
| .126 TO .250   | + .005 / - .001 |           |  |
| .251 TO .500   | + .006 / - .001 |           |  |
| .501 TO .750   | + .008 / - .001 |           |  |
| .751 TO 1.000  | + .010 / - .001 |           |  |
| 1.001 TO 2.000   | + .012 / - .001 |           |  |

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

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).

DWG TITLE  
**PE-W15CA001**

FSCM NO. 53919

CAD FILE 101915

SCALE N/A

SIZE A

150



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