



## WR-12 UG-387/U Round Cover Flange to 1.0mm Female Waveguide to Coax Adapter Operating from 60 GHz to 90 GHz

### Waveguide to Coax Adapters Technical Data Sheet

PE-W12CA001

#### Features

- E Band, 60 to 90 GHz Frequency Range
- WR-12 Waveguide
- UG-387/U Round Cover Flange
- 1.0 mm Female RF Interface
- Comprehensive waveguide offerings also include E-Bends, H-Bends, Sections, Filters, Terminations, Couplers, and more.

#### Description

The PE-W12CA001 is a waveguide to coaxial adapter operating in the E Band with a 60 to 90 GHz frequency range. This adapter offers a WR-12 waveguide interface size coupled with a precision tolerance UG-387/U Round Cover flange. The PE-W12CA001 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 mm Female Connector endorsed by the International Electrotechnical Commission (IEC).

#### Configuration

Waveguide Size	WR-12
Flange	UG-387/U Round Cover
RF Connector	1.0mm Female
Impedance	50 Ohms
Body Geometry	Right Angle

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	60		90	GHz
VSWR			1.67:1	
Insertion Loss		1	1.5	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	0.03 lbs [13.61 g]
<b>RF Connector</b>	
Connector Type	1.0mm Female
Body Material and Plating	Stainless Steel
<b>Waveguide Interface</b>	
Waveguide Type	WR-12

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 UG-387/U Round Cover Flange to 1.0mm Female Waveguide to Coax Adapter Operating from 60 GHz to 90 GHz PE-W12CA001](#)



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Flange Type  
Flange Designation  
Body Material and Plating  
Plating Specification

Round Cover  
UG-387/U  
Aluminum, Gold  
ASTMB488

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +85 deg C

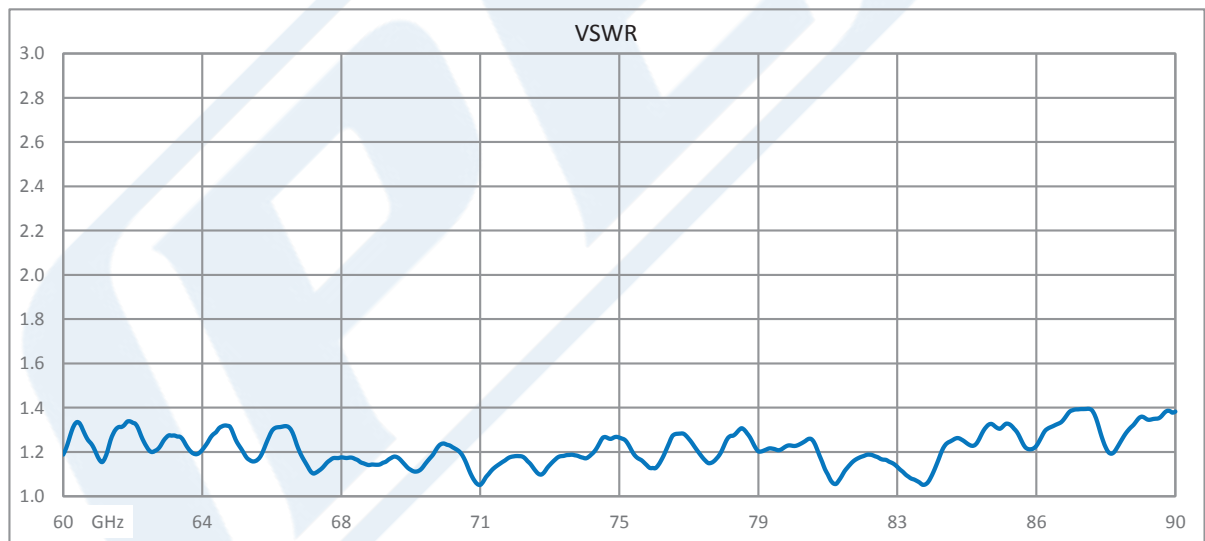
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

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

**Typical Performance Data**



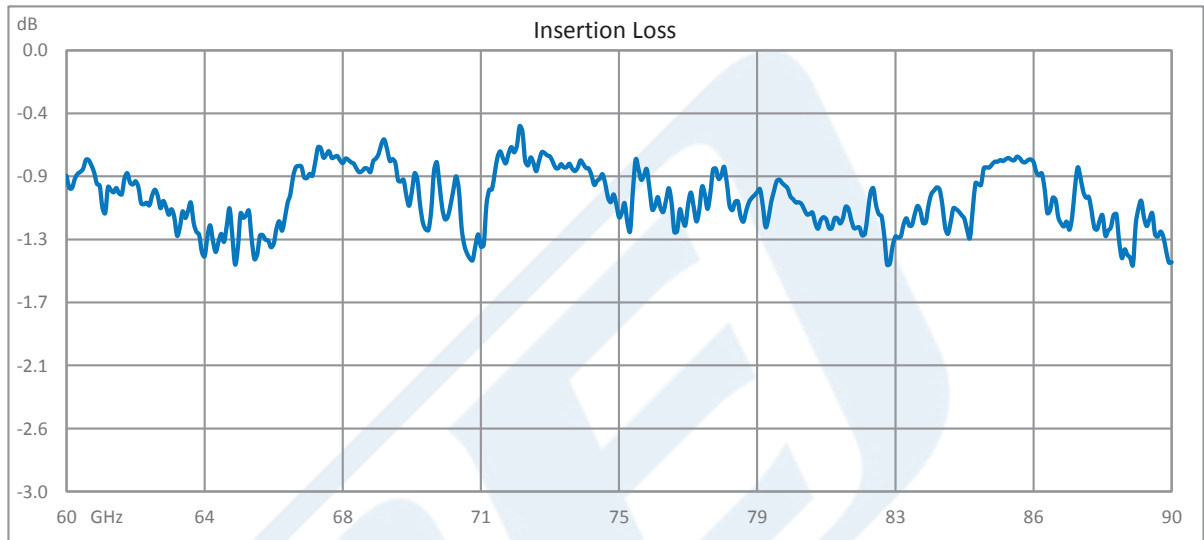
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WR-12 UG-387/U Round Cover Flange to 1.0mm Female Waveguide to Coax Adapter Operating from 60 GHz to 90 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

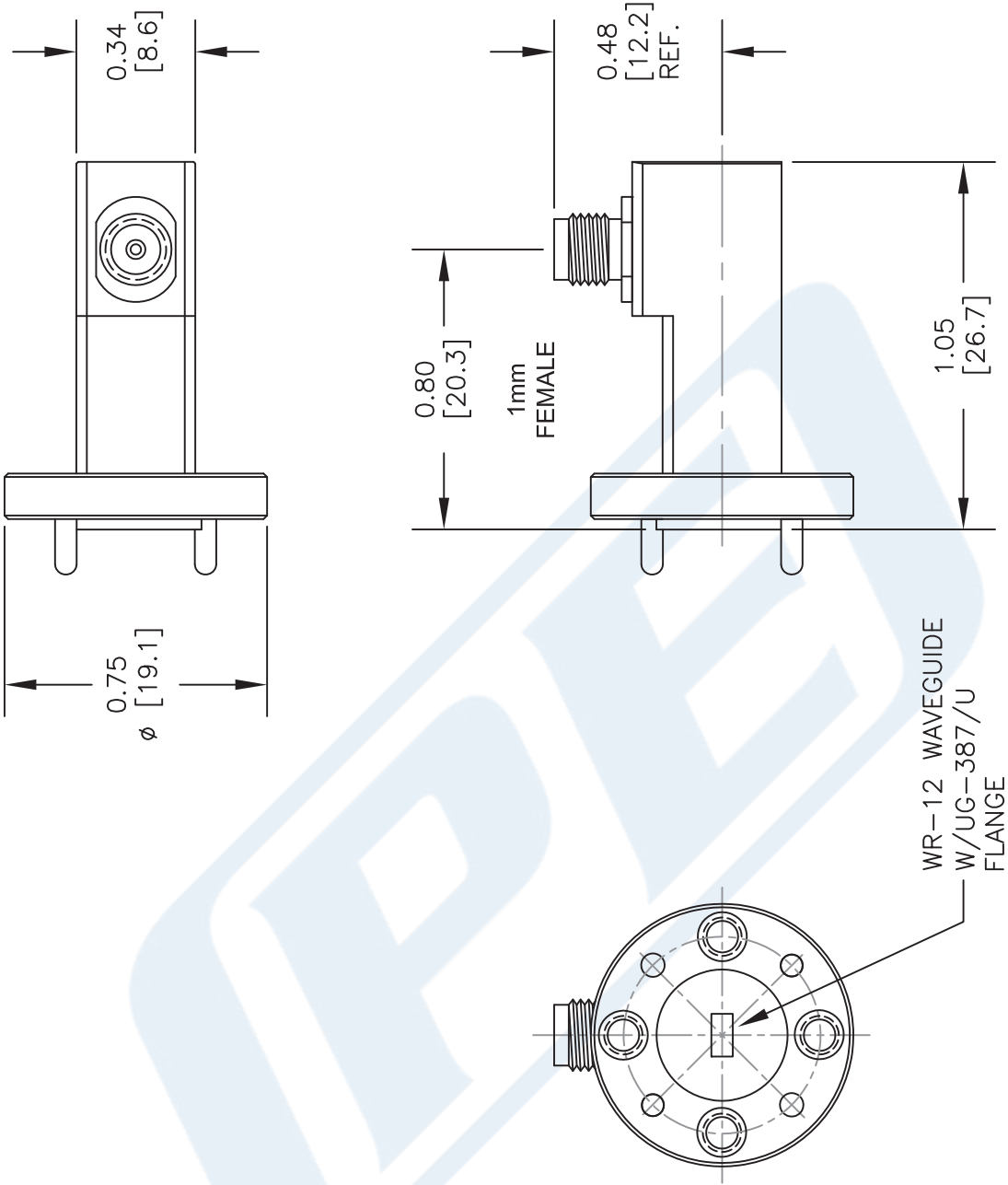
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

PE-W12CA001 CAD Drawing

WR-12 UG-387/U Round Cover Flange to 1.0mm Female Waveguide  
to Coax Adapter Operating from 60 GHz to 90 GHz



UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN: inches [mm]  
TOLERANCES ARE:  
DECIMALS ANGLES FRACTIONS  
.XX ±.01 ±1/2° ± 1/64  
.XXX ±.005 [± 127/320]  
[±.127]

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

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DWG TITLE  
**PE-W12CA001**

CAGE CODE 53919

CAD FILE 122816 SCALE N/A SIZE A 2233

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].