



WR-90 Commercial Grade Straight Waveguide Section 12 Inch Length with UG-39/U Flange Operating from 8.2 GHz to 12.4 GHz

TECHNICAL DATA SHEET

PE-W90S001-12

Pasternack's waveguide sections are constructed of a high quality copper alloy designed to provide VSWR as low as 1.03:1. Waveguide sections range from WR-12 up to WR-137 and include grooved and non-grooved designs. Standard lengths of Pasternack waveguide sections range from 3" to 12" in 3" increments and each waveguide section is labeled for easy identification. Custom lengths are also available on request. Standard sections of waveguide are painted in blue and our instrumentation-grade versions are gold plated.

Features

- WR-12 to WR-137 Waveguide Sections
- Grooved and Non-Grooved Flanges Available
- Sections Covering Frequencies from 5.8 to 90 GHz
- E-Bends, H-Bends, Filters, Terminations and Waveguide to Coax adapters are also available
- Custom lengths are also available on request

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	8.2		12.4	GHz
VSWR		1.03:1		
Insertion Loss		0.1 [0.33]		dB/ft [dB/m]

Mechanical Specifications

Waveguide Size	WR-90
Waveguide Design	Commercial Grade
Section Length	12 in [304.8 mm]

Description	Flange 1	Waveguide	Flange 2
Flange Type	Square Cover		Square Cover
Flange Designation	UG-39/U	WR-90	UG-39/U
Material	Copper Alloy	Copper Alloy	Copper Alloy
Plating	Paint	Paint	Paint
Color	Gray	Gray	Gray

Size

Weight	0.905 lbs [410.5 g]
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Compliance Certifications (see [product page](#) for current document)

Notes:

- Values at +25 °C, sea level

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-90 Commercial Grade Straight Waveguide Section 12 Inch Length with UG-39/U Flange Operating from 8.2 GHz to 12.4 GHz PE-W90S001-12](#)



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WR-90 Commercial Grade Straight Waveguide Section 12 Inch Length with UG-39/U Flange Operating from 8.2 GHz to 12.4 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.

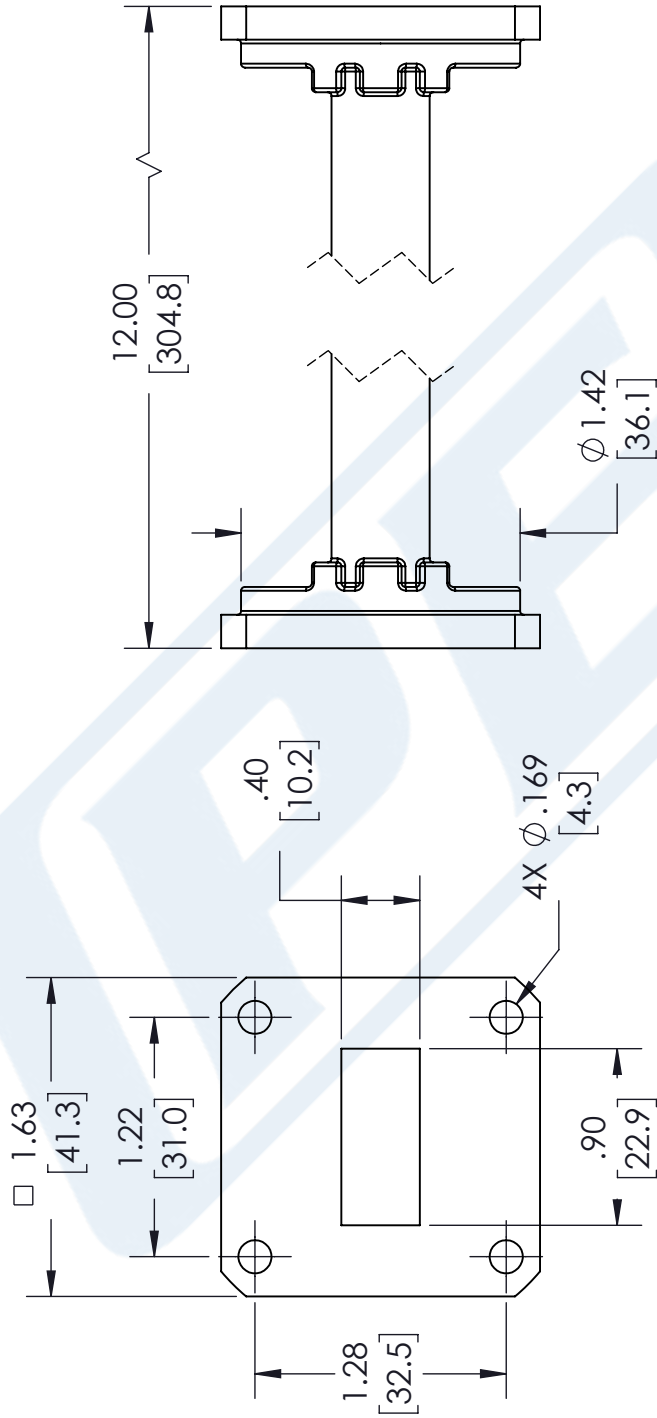
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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-W90S001-12 CAD Drawing

WR-90 Commercial Grade Straight Waveguide Section 12 Inch Length
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<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p>		<p>SHEET 1 OF 1</p>		<p>SCALE N/A</p>		<p>REV B</p>	
<p>PE PASTERNAK an INFINITI brand</p> <p>Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p>		<p>ITEM NO. PE-W90S001-12</p>		<p>SIZE A</p>		<p>CAGE CODE 53919</p>	
<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p>		<p>TOLERANCES:</p>		<p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>		<p>THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.</p>	
<p>X = ±.2 [5.08]</p> <p>.XX = ±.02 [.51]</p> <p>.XXX = ±.005 [.13]</p>		<p>FRACTIONS ± 1/32</p> <p>ANGLES ± 1°</p>		<p>CABLE LENGTH (L) TOLERANCES:</p>		<p>L ≤ 12 [305] = +1 [25] / -0</p>	
<p>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</p>		<p>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</p>		<p>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</p>		<p>300 [7620] < L = +5% / -0</p>	