

## Brass WR-42 Waveguide Pressure Window with UG-595/U and UG-595/U-Grooved Flanges

Waveguide pressure windows are used to isolate pressurized components from non-pressurized components within a waveguide system. They can also provide protection against contaminants (debris, moisture and dust) from entering the waveguide system and degrading its RF performance. The FMWGP1012 is a WR-42 waveguide pressure windows that operates in the frequency range of 18 GHz to 26.5 GHz. This WR-42 waveguide termination has a Max VSWR of 1.25:1. This waveguide pressure window is made of painted aluminum and incorporates UG-595/U and UG-595/U-Grooved flange interface. In addition to waveguide pressure window product line, Fairview Microwave also offers a wide range of waveguide products which are available in stock and ready for same-day shipment.

### Electrical Specifications\*

Description	Min	Typ	Max	Units
Frequency Range	18		26.5	GHz
VSWR			1.25:1	
Insertion Loss			0.3	dB
Input Power			100	Watts

### Mechanical Specifications

Body Material	Copper Brass
Body Finish	Gold
Length	0.881 in [22.38 mm]
Width	0.881 in [22.38 mm]
Height	0.59 in [14.99 mm]
Weight	0.11 lbs [49.9 g]

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

Brass WR-42 Waveguide Pressure Window with UG-595/U and UG-595/U-Grooved Flanges from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Brass WR-42 Waveguide Pressure Window with UG-595/U and UG-595/U-Grooved Flanges FMWGP1012](#)

URL: <https://www.fairviewmicrowave.com/fmwgp1012-p.aspx>

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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



### Features:

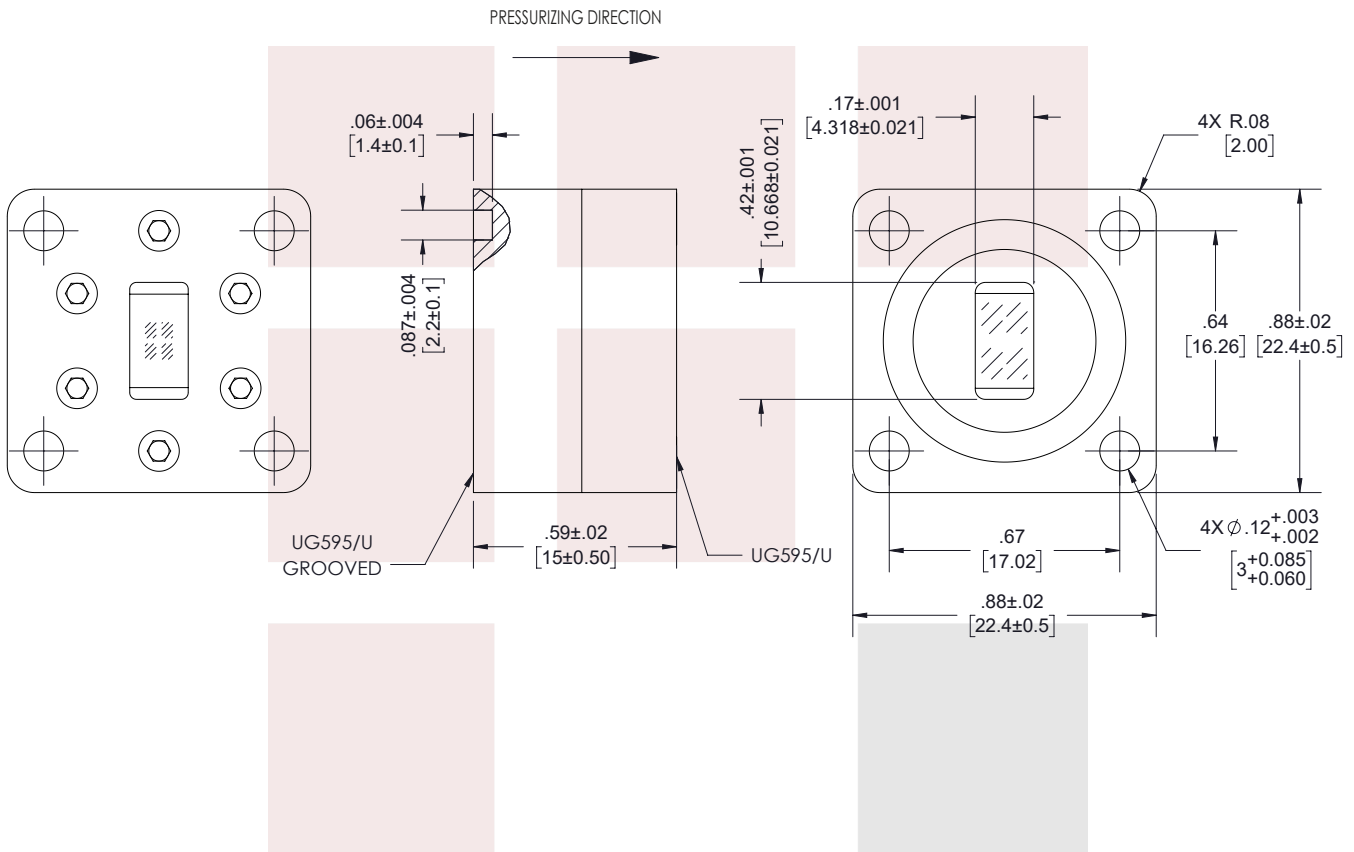
- WR-42 Waveguide
- Operating Frequency Range from 18 GHz to 26.5 GHz
- UG-595/U and UG-595/U-Grooved Flanges
- 1.25:1 Max VSWR
- 100 Watts (CW) Max Power Handling
- Insertion loss: 0.3 dB Max
- Thickness: 0.59 inches
- PTFE window material
- Pressure Handling Capability: 29 PSI Max

### Applications:

- Radar Systems
- Military and Space
- Wireless Radio Systems
- Communication Systems
- R&D Labs
- Microwave Radio Systems

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	15-04-2021	SPONG



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><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p>	<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p>		<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>												
	<p>TOLERANCES:</p> <table border="0"> <tr> <td>.X ± .2 [ .508]</td> <td>FRACTIONS ± 1/32</td> <td>L ≤ 12 [305] = +1 [25] / -0</td> <td>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</td> </tr> <tr> <td>.XX ± .02 [ .51]</td> <td>ANGLES ± 1°</td> <td>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</td> <td>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</td> </tr> <tr> <td>.XXX ± .005 [ .13]</td> <td></td> <td>300 [7620] &lt; L = +5%L / -0</td> <td></td> </tr> </table>		.X ± .2 [ .508]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XX ± .02 [ .51]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	120 [3048] < L ≤ 300 [7620] = +6 [152] / -0	.XXX ± .005 [ .13]		300 [7620] < L = +5%L / -0		<p>CABLE LENGTH (L) TOLERANCES:</p>
.X ± .2 [ .508]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	12 [305] < L ≤ 60 [1524] = +2 [51] / -0												
.XX ± .02 [ .51]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0	120 [3048] < L ≤ 300 [7620] = +6 [152] / -0												
.XXX ± .005 [ .13]		300 [7620] < L = +5%L / -0													
<p>TITLE</p> <p><b>Brass WR-42 Waveguide Pressure Window with UG-595/U and UG-595/U-Grooved Flanges</b></p>				<p>SHEET 1 OF 1</p>											
<p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>				<p>SCALE N/A</p>											
SIZE A	CAGE CODE 3FKR5	DRAWN BY MVEERAPPAN	ITEM NO. FMWGP1012	REV A											

T-Rev.D