

## WR-42 90 Degree Waveguide Twist Using a UG-595/U Flange And a 18 GHz to 26.5 GHz Frequency Range

The SMW42TW1001 is a 90 degree waveguide twist that is part of a family of precision manufactured twists with square cover per MIL-DTL-85. The family includes right and left hand 45 degree twists as well as 90 degree twists. These twists are offered in the Ka through W waveguide bands (18 to 110 GHz).

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	18		26.5	GHz
VSWR			1.07: 1	
Insertion Loss			0.5	dB

### Mechanical Specifications

Waveguide Size WR-42  
Section Length 2.7 in [68.58 mm]

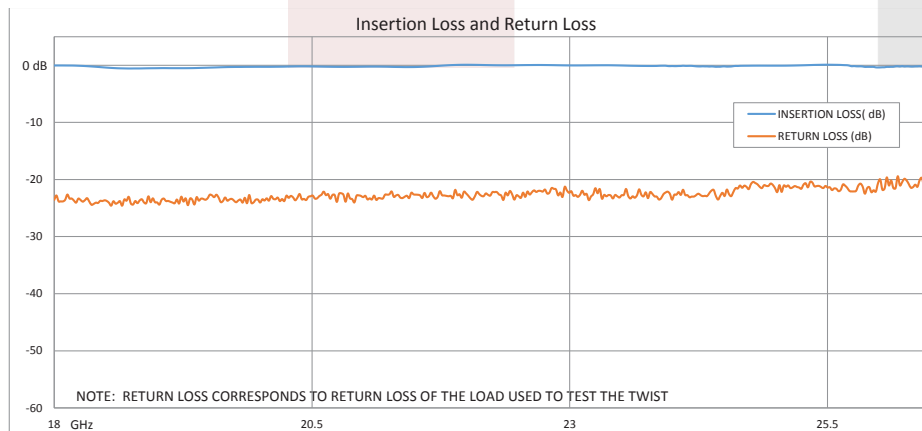
Description	Flange 1	Waveguide	Flange 2
Interface	UG-595/U	WR-42	UG-595/U
Material	Brass	Brass	Brass
Plating	Gold	Gold	Gold
Color	Gold	Gold	Gold

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

### Plotted and Other Data

Notes:  
• Notes, Plotted Data

### Typical Performance Data



### Features:

- WR-42
- 18 to 26.5 GHz
- UG-595/U Flange
- 1.07: 1 Maximum VSWR
- 90° Twist

### Applications:

- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production Systems

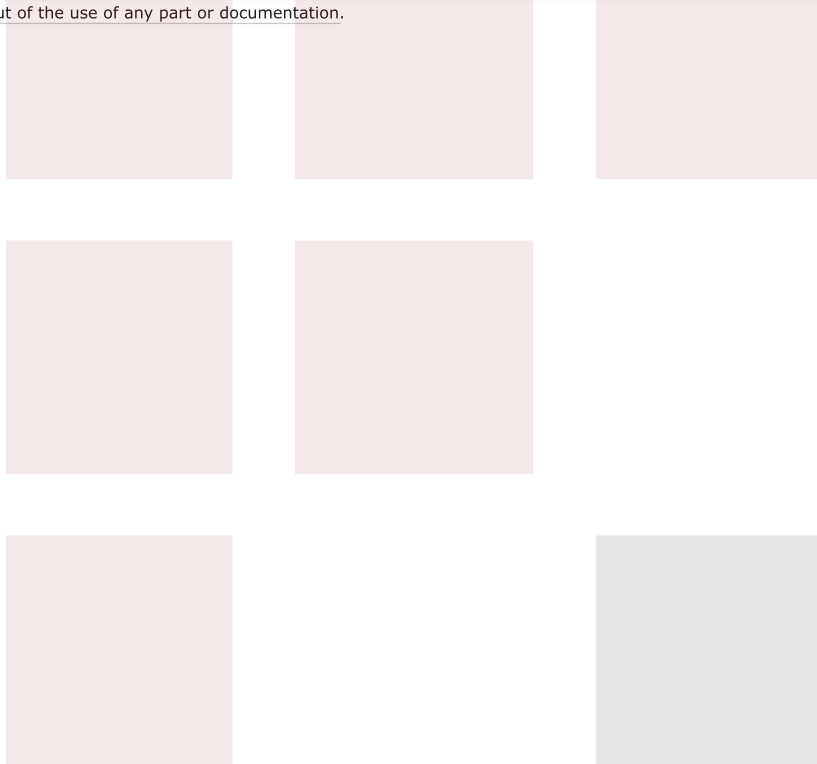
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WR-42 90 Degree Waveguide Twist Using a UG-595/U Flange And a 18 GHz to 26.5 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

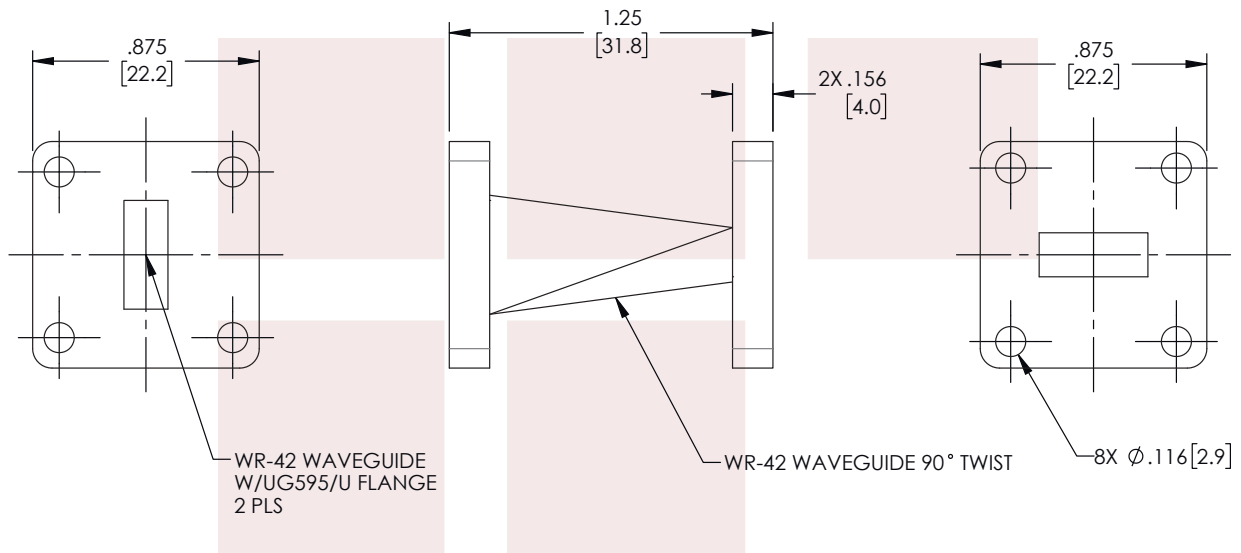
For additional information on this product, please click the following link: [WR-42 90 Degree Waveguide Twist Using a UG-595/U Flange And a 18 GHz to 26.5 GHz Frequency Range SMW42TW1001](#)

URL: <https://www.fairviewmicrowave.com/wr-42-90-waveguide-twist-ug595-18-26.5-ghz-smw42tw1001-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	UPDATE DIMENSIONS	6/21/2021	DRIVAS



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<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><b>TOLERANCES:</b></p> <table border="0"> <tr> <td>.X = ±.1 [2.5]</td> <td>FRACTIONS ± 1/32</td> <td rowspan="4"> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] &lt; L = +5%L / -0</p> </td> </tr> <tr> <td>.XX = ±.01 [25]</td> <td></td> </tr> <tr> <td>.XXX = ±.001 [0.25]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td></td> <td></td> </tr> </table>		.X = ±.1 [2.5]	FRACTIONS ± 1/32	<p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <p>L ≤ 12 [305] = +1 [25] / -0</p> <p>12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0</p> <p>60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0</p> <p>120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0</p> <p>300 [7620] &lt; L = +5%L / -0</p>	.XX = ±.01 [25]		.XXX = ±.001 [0.25]	ANGLES ± 1°			<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p>
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<p>SIZE A</p> <p>CAGE CODE 3FKR5</p>	<p>DRAWN BY DMAY</p>	<p>ITEM NO. SMW42TW1001</p>	<p>REV B</p>									

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