

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

The SMW42TW1001A 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 1.25 in [31.75 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

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 SMW42TW1001A](#)

URL: <https://www.fairviewmicrowave.com/wr-42-90-waveguide-twist-ug595-18-26.5-ghz-smw42tw1001a-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:

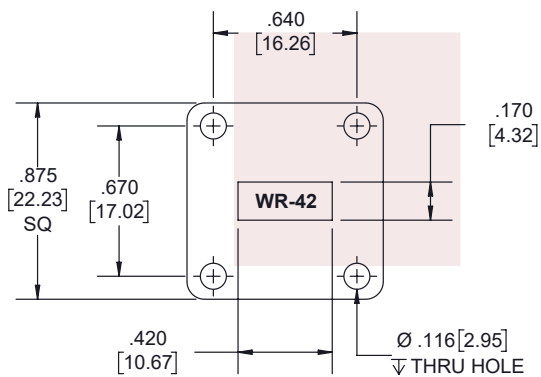
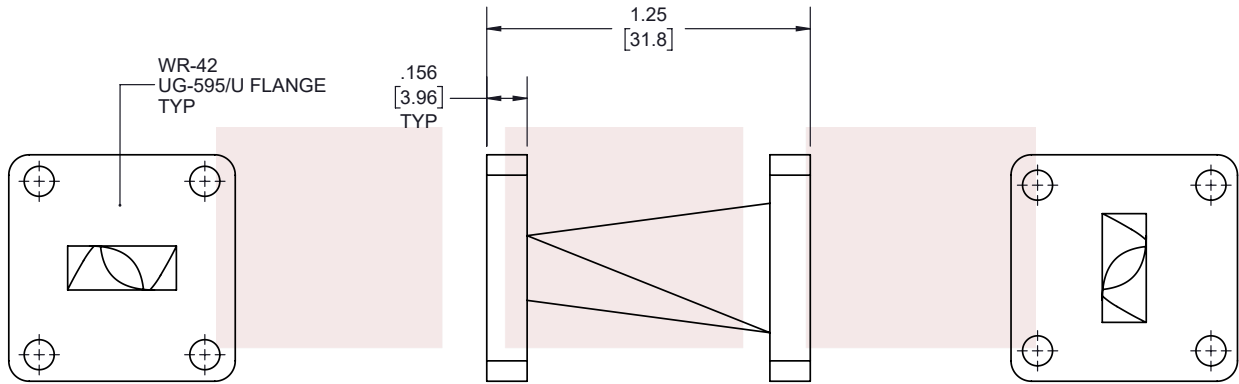
- WR-42 waveguide
- Operating frequency range 18 to 26.5 GHz
- UG-595/U Flange
- 1.07:1 Maximum VSWR
- 90° Twist

Applications:

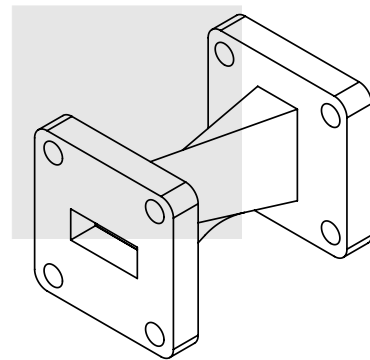
- Instrumentation
- Precision measurements
- Prototyping and characterization
- Production Systems

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
sales@fairviewmicrowave.com

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	9/28/2021	S. PONG



FLANGE DETAIL



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.

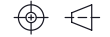
TITLE
WR-42 90 Degree Waveguide Twist Using a UG-595/U Flange And a 18 GHz to 26.5 GHz Frequency Range

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08] FRACTIONS L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51] ± 1/32 12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13] ANGLES ± 1° 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. SMW42TW1001A	REV A
-----------	--------------------	--------------------	--------------------------	----------

T-Rev.D