

## WRD-180 90 Degree Waveguide Twist Using a UG Square Cover Flange with a 18 GHz to 40 GHz Frequency Range in Brass

The FMWRD180TW1001 is a 90 degree double-ridge waveguide twist that is part of a family of precision manufactured waveguide twists with UG style square cover flanges. 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		40	GHz
VSWR			1.35:1	
Insertion Loss			0.5	dB

Electrical Specification Notes:

VSWR measurement is the representation of the load used for testing

### Mechanical Specifications

Waveguide Size WRD-180  
 Section Length 3.14 in [79.76 mm]

Description	Flange 1	Waveguide	Flange 2
Interface	UG	WRD-180	UG
Material	Brass	Copper	Brass
Plating	Gold	Gold	Gold
Color	Gold	Gold	Gold

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

### Plotted and Other Data

Notes:

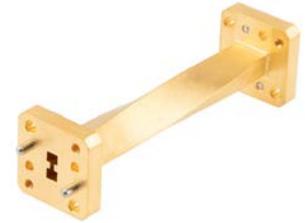
- Notes, Plotted Data

WRD-180 90 Degree Waveguide Twist Using a UG Square Cover Flange with a 18 GHz to 40 GHz Frequency Range in Brass 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: [WRD-180 90 Degree Waveguide Twist Using a UG Square Cover Flange with a 18 GHz to 40 GHz Frequency Range in Brass FMWRD180TW1001](#)

URL: <https://www.fairviewmicrowave.com/wrd-180-90-waveguide-twist-ug385-50-75-ghz-fmwr180tw1001-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.

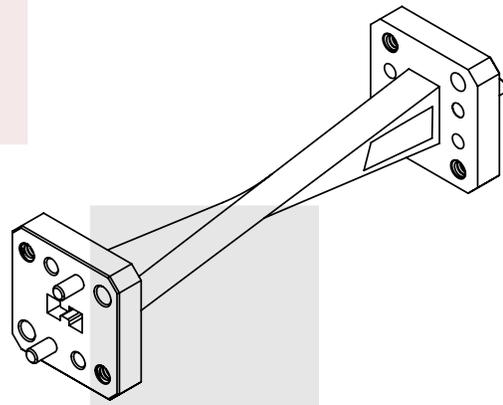
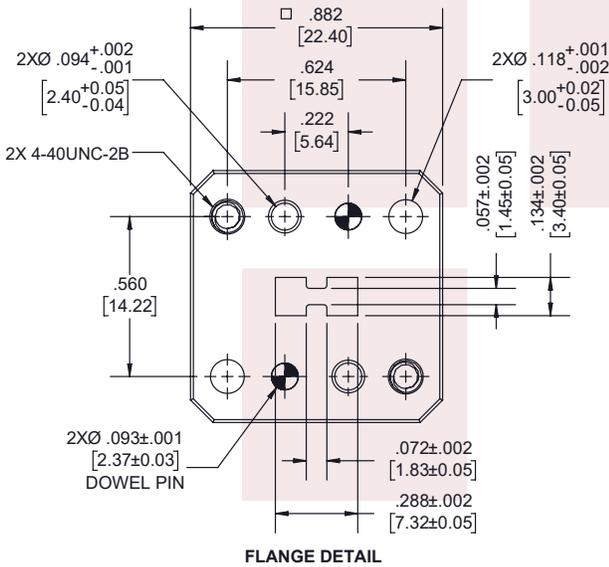
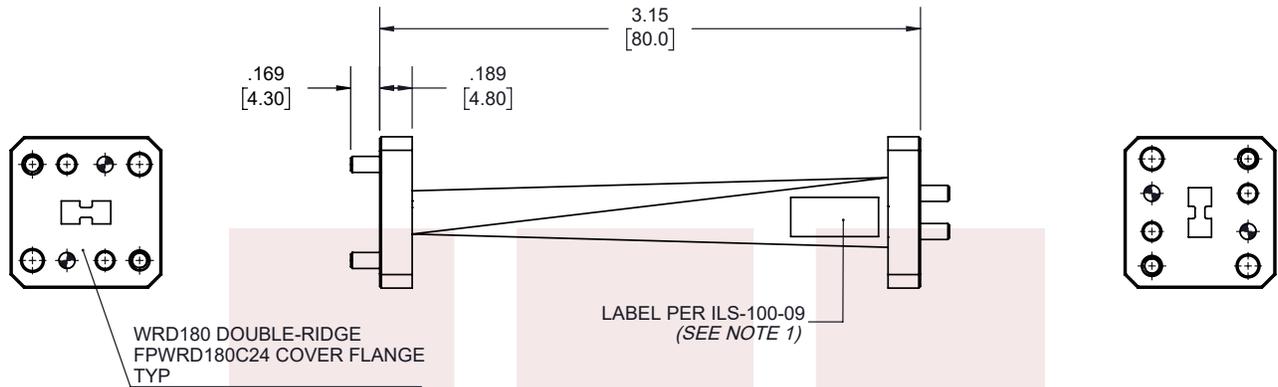


### Features:

- WRD-180 Double-Ridged Waveguide
- Frequency range from 18 to 40 GHz
- UG Style Square Cover Flange
- 1.35 Maximum VSWR
- 90° Twist

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/2/2020	S.PONG



**NOTES:**

1. LABEL PER ILS-100-09. FOR INTERNAL REFERENCE ONLY. LABEL LOCATION FOR REFERENCE ONLY.

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

<b>TOLERANCES:</b>		<b>CABLE LENGTH (L) TOLERANCES:</b>	
.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0	
.XX = ±.02 [.51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	
.XXX = ±.005 [.13]		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  
  
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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMWRD180TW1001	REV A
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