



## WR-42 45 Degree Right-hand Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 GHz

### Waveguide Twists Technical Data Sheet

PE-W42TW1003

#### Features

- WR-42
- 18 to 26.5 GHz
- UG-595/U Flange
- 45° Right Hand (Clockwise) Twist

#### Applications

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

#### Description

The PE-W42TW1003 is a 45 degree right hand 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	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
VSWR			1.25:1	
Insertion Loss			0.75	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

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 45 Degree Right-hand Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 GHz PE-W42TW1003](#)

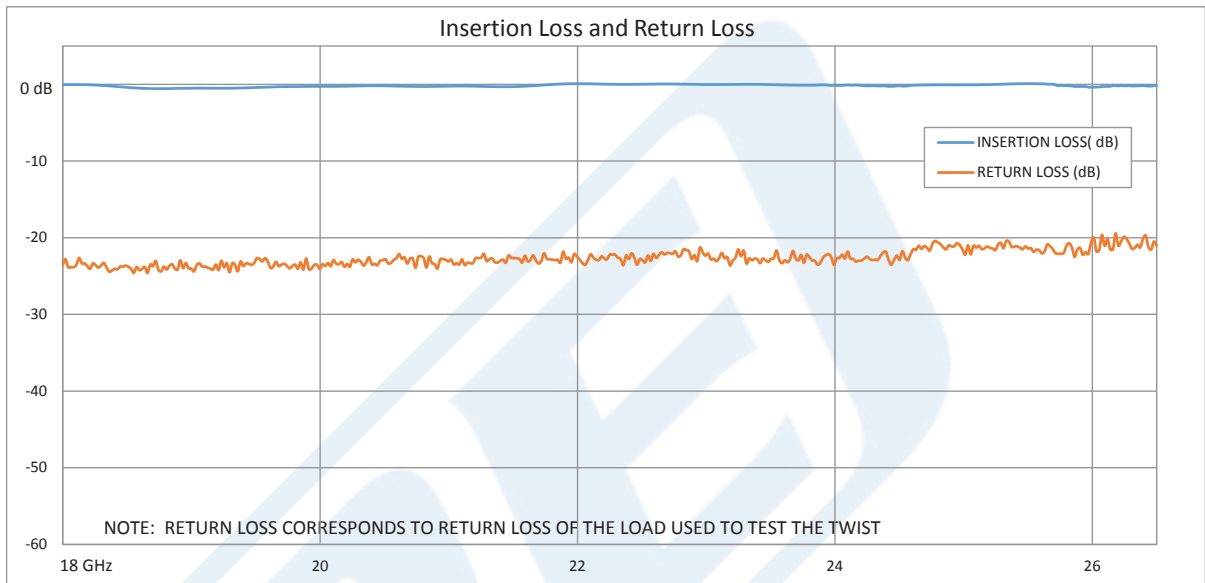


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### Typical Performance Data



WR-42 45 Degree Right-hand Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 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.

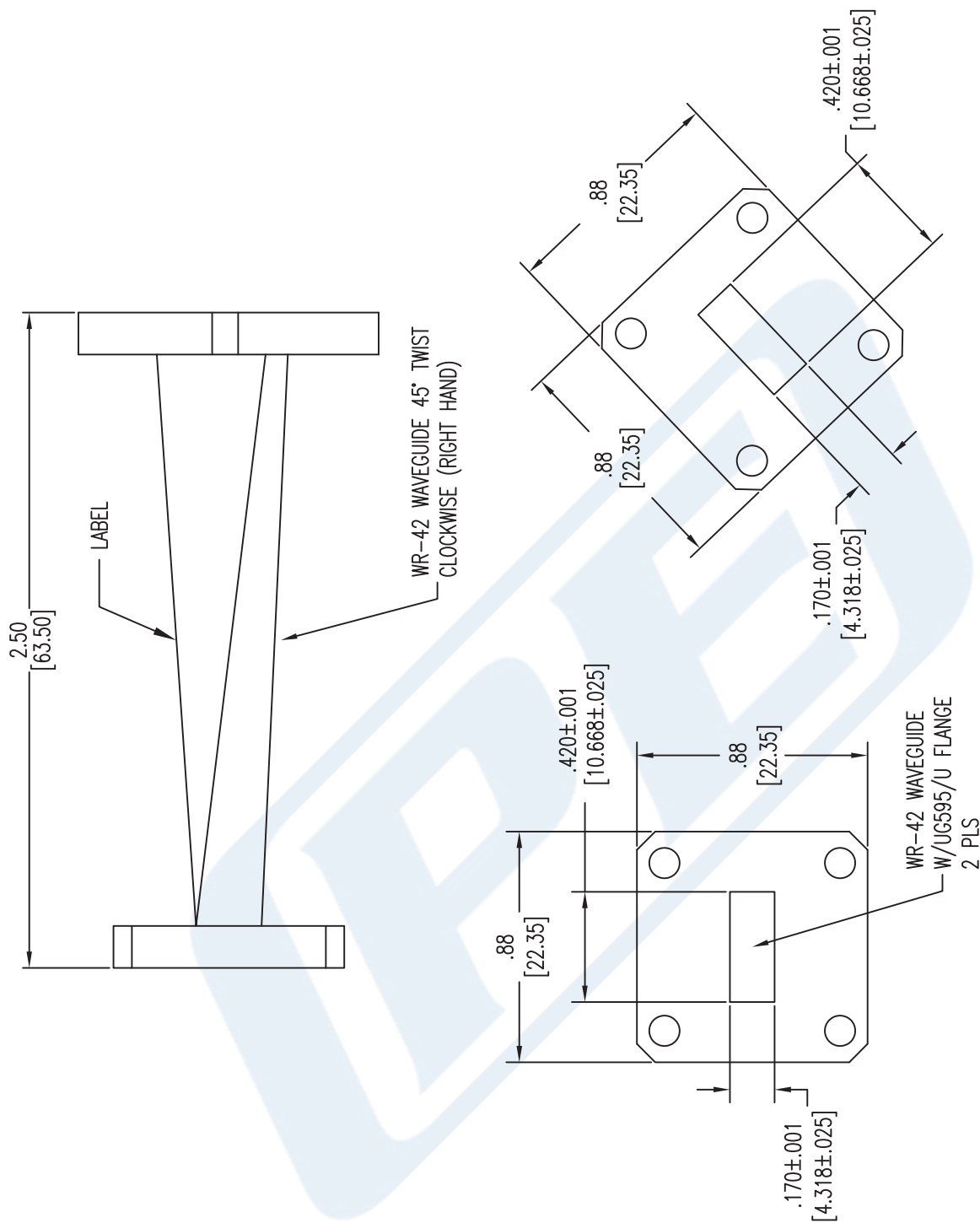
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 45 Degree Right-hand Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 GHz PE-W42TW1003](https://www.pasternack.com/wr-42-45-waveguide-twist-ug595-18-26.5-ghz-pe-w42tw1003-p.aspx)

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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-W42TW1003 CAD Drawing

WR-42 45 Degree Right-hand Waveguide Twist With a UG-595/U Flange Operating From 18 GHz to 26.5 GHz



UNLESS OTHERWISE SPECIFIED:  
 DIMENSIONS ARE IN: inches [mm]  
 TOLERANCES ARE:  
 DECIMALS ±.10 [±.254]  
 FRACTIONS ± 1/64 [±.0156]  
 ANGLES ±1/2° [±.127]  
 .XXX ±.005 [±.127]

\* THESE DIMENSIONS AND TOLERANCES SUPERSEDE NOTE #1 ON TITLE BLOCK.

NOTES:  
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
 3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE  
**PE-W42TW1003**

FSCM NO. 53919

CAD FILE 040116

SCALE N/A

SIZE A

2233

**PE PASTERNAK®**  
 THE ENGINEER'S RF SOURCE

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