

# WR-42 Twistable Flexible Waveguide Using UG-595/U Square Cover Flange With a 18 GHz to 26.5 GHz Frequency Range

The SMW42TF005-36 is one of Fairview Microwave's flexible, twistable sections which operates in the 18 to 26.5 GHz range. It can be twisted and/or bent in both the E and H planes without impairing VSWR or attenuation because of its silver coated helically wound brass body construction. The twistable section is covered in a neoprene jacket which allows the section to be pressurized as well as protecting the waveguide's integrity.

## **Electrical Specifications**

| Description     | Min | Тур    | Max  | Units |
|-----------------|-----|--------|------|-------|
| Frequency Range | 18  |        | 26.5 | GHz   |
| VSWR            |     | 1.35:1 |      |       |
| Insertion Loss  |     | 1.05   |      | dB    |
|                 |     |        |      |       |

# **Mechanical Specifications**

|                         | •                |
|-------------------------|------------------|
| Waveguide Size          |                  |
| Waveguide Design        |                  |
| Section Length          |                  |
| E-Plane Minimum Bend    | Radius, One Time |
| E-Plane Minimum Bend    | Radius, Repeated |
| H-Plane Minimum Bend    | Radius, One Time |
| H-Plane Minimum Bend    | Radius, Repeated |
| Maximum Offset Rotation | on, One Time     |
| Maximum Offset Rotation | on, Repeated     |
| Maximum Operating Pro   | essure           |

WR-42 Twistable 36 in [914.4 mm] 1.5 in [38.1 mm] 6 in [152.4 mm] 3 in [76.2 mm] 12 in [304.8 mm] 155 degrees/ft 45 degrees/ft 45 psig

| Description | Flange 1     | Waveguide | Flange 2     |  |
|-------------|--------------|-----------|--------------|--|
| Туре        | Square Cover | WR-42     | Square Cover |  |
| Designation | UG-595/U     |           | UG-595/U     |  |
| Material    | Brass        | Brass     | Brass        |  |
| Plating     |              | Silver    |              |  |
| Color       | Gold         | Black     | Gold         |  |

# **Compliance Certifications** (visit www.FairviewMicrowave.com for current document)

RoHS Compliant Yes

REACH Compliant 12/17/2015

#### **Plotted and Other Data**

Notes:

· Notes, Plotted Data

# SMW42TF005-36 DATA SHEET



## Features:

- Twistable/Flexible in both the E and H plane
- Neoprene Jacket allows pressurization
- 18 GHz to 26.5 GHz Range
- Brass flanges with a silver plated brass body

# Applications:

- Test Benches
- · Microwave Radio
- Pressurized waveguide systems
- · Provides vibration isolation
- Easily connects misaligned sections.
- Relieves mechanical stresses caused by thermal expansion/contraction.

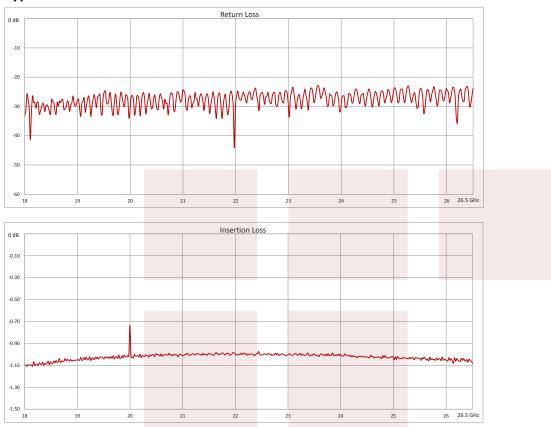
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### **Typical Performance Data**



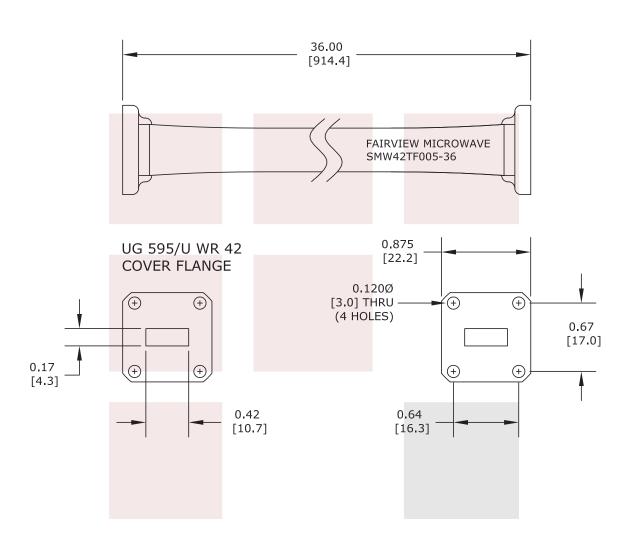
WR-42 Twistable Flexible Waveguide Using UG-595/U Square Cover Flange With a 18 GHz to 26.5 GHz Frequency Range from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas.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

For additional information on this product, please click the following link: WR-42 Twistable Flexible Waveguide Using UG-595/U Square Cover Flange With a 18 GHz to 26.5 GHz Frequency Range SMW42TF005-36

URL: https://www.fairviewmicrowave.com/wr-42-twistable-flexible-waveguide-ug595-square-18-26.5-ghz-smw42tf005-36-p.aspx

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| FAIRVIEW MICROWAVE INC.  ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM  | 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]. |       |         |                 |        |
|---|---|-------|---------|-----------------|--------|
| WR-42 Twistable Flexible Waveguide Using UG-595/U<br>Square Cover Flange With a 18 GHz to 26.5 GHz<br>Frequency Range | DWG NO SMW42TF005-36  |       | С       | CAGE CODE 3FKR5 |        |
|   | CAD FILE 092815   | SHEET | SCALE I | N/A             | SIZE A |