# ERA\ANT

## WR-22 Flexible and Twistable Waveguide Section, 5.91" (150 mm) Long

**SWG-22059-FB-FT-A-G** is a 5.91" (150 mm) long, Q-band flexible and twistable waveguide section with the WR-22 waveguide and UG-383/U anti-cocking flange. It also has a vulcanized silicone rubber jacket for robustness applications. The waveguide features a flexible bend with a static twist to be long-term stress free when it is integrated into systems. The flanges of the waveguide are grooved to accept rubber rings to be watertight for outdoor applications. The waveguide is manufactured with a precision manufacturing process to ensure high quality. The waveguide has low insertion loss in the frequency range of 33 to 50 GHz. Various standard and custom length options are available under different model numbers.



## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50 GHz
Insertion Loss		0.8 dB	
Return Loss		14 dB	
Power Handling			50 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## **Mechanical Specifications:**

Item	Specification	
Waveguide Size	WR-22 Waveguide with UG-383/U Anti- Cocking Grooved Flange	
Minimum Bending Radius (Static)	E-Plane: 1" (26 mm); H-Plane: 2" (52 mm)	
Minimum Bending Radius (Dynamic)	E-Plane: 3" (78 mm); H-Plane: 6.6" (158 mm)	
Maximum Torsion Angle (Static)	530°/meter	
Maximum Torsion Angle (Dynamic)	230°/meter	
Material	Brass	
Flange Finish	Nickel Plated	
Waveguide Finish	Silver Plated	
Waveguide Jacket Material	Vulcanized Silicone Rubber	
Weight	18 Oz	
Insertion Length	5.91" (150 mm) (±3%)	
Outline	WG-FQ-FT-A-G-L	

## ECCN

EAR99

### FEATURES

- High Quality
- Flexible Bending and Static
  Twisting
- Comparable Cost to the Rigid Waveguide

## APPLICATIONS

- 5G Systems
- Communication Systems
- Various Outdoor Equipment

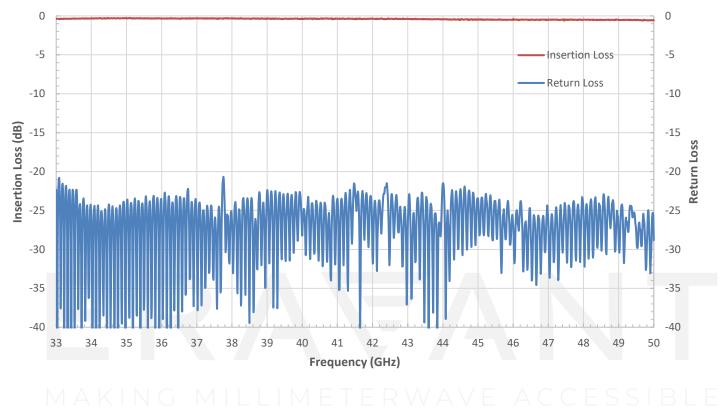
### SUPPLEMENTAL DETAILS



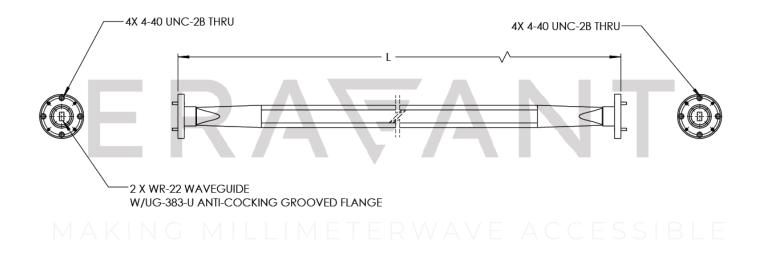
## SWG-22059-FB-FT-A-G

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## **Typical Performance vs. Frequency**



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



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#### NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

#### CAUTION:

• If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.

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