SWG-22354-FB-FT-A-G

WR-22 Flexible Twistable Waveguide Section, 35.4" (900 mm) Length

Description:

Model SWG-22354-FB-FT-A-G is a 35.4" (900 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 longterm 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.

Features:

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

Applications:

- 5G Systems
- Communication Systems
- Various Outdoor Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	33 GHz		50 GHz
Insertion Loss		2.3 dB	
Return Loss		14 dB	
Specification Temperature		+25 °C	
Operation Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification	
Waveguide Port	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	7.8 Oz	
Insertion Length	35.4" (900 mm) (±3 %)	
Outline	WG-FQ-FT-A-G-L	



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



Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- Other mechanical configurations are available under different model numbers.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

• Any foreign objects in the waveguide will cause performance degradation and possible device damage.



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