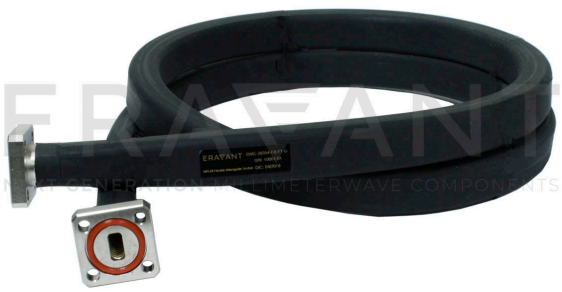
SWG-22059-FB-FT-G-599

WR-22 Flexible, Twistable Waveguide Section, 5.91” (150 mm) Long, 33 to 50 GHz

SWG-22059-FB-FT-G-599 is a 5.91” (150 mm) long flexible and twistable WR-22 waveguide section. The waveguide section features a flexible bend with a static twist design to be stress free long-term when it is integrated in a system. The grooved waveguide flanges allow for O-rings to be installed for watertight performance in outdoor applications. The vulcanized silicone rubber jacket provides a robust frame for long-term performance. 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. Other standard lengths are available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	33 GHz		50 GHz
Insertion Loss		0.5 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 Port	WR-22 Waveguide with UG-599/U-M Grooved Flange
Insertion Length	5.91” (150 mm) (±3 %)
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/Flange Finish/Waveguide Finish	Brass / Nickel Plated / Silver Plated
Jacket Material	Vulcanized Silicone Rubber
Weight	6.7 oz
Outline	WG-FQ-FB-FT-G-L-599

ECCN

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FEATURES

- Broadband Coverage from 33 to 50 GHz
- High Quality
- Flexible Bending and Static Twisting
- Comparable Cost to Rigid Waveguide

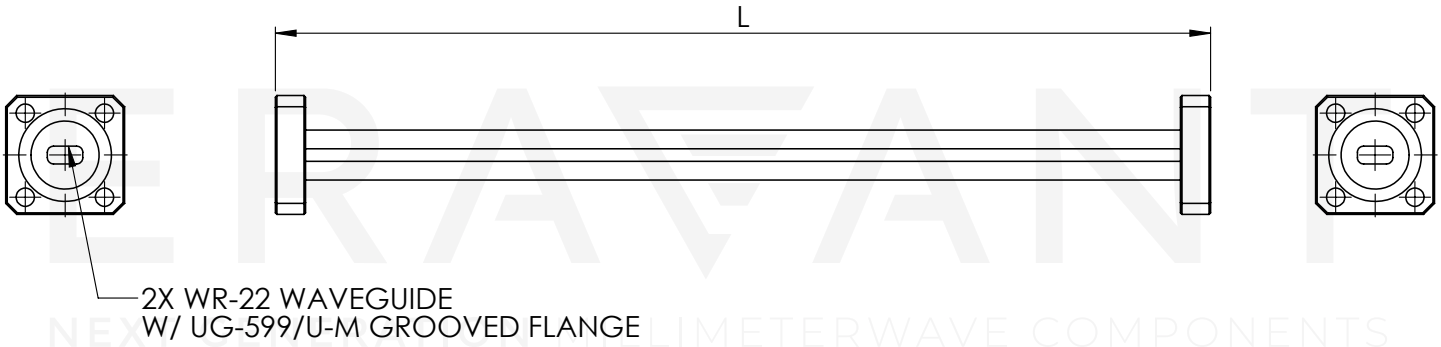
APPLICATIONS

- 5G Systems and IoT
- Communication Systems
- Various Outdoor Equipment

SUPPLEMENTAL DETAILS

Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

LENGTH "L" IS CUSTOMIZABLE

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.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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.
- Any foreign objects in the antenna will cause performance degradation and possible device damage.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.