

## SWG-10020-FB-F

### WR-10 Flexible Waveguide Section, 2" (50.8 mm) Length

**SWG-10020-FB-F** is a 2" (50.8 mm) long, W-band flexible waveguide section with a WR-10 waveguide and UG-387/U-M flange. It also has a polysulfide rubber jacket for robustness applications. The waveguide features a flexible bend to be long-term stress free when it is integrated into systems. The waveguide is manufactured with a precision manufacturing process to ensure high quality. The waveguide has low insertion loss in the frequency range of 75 to 110 GHz. Various standard and custom length options are available under different model numbers.



#### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	75 GHz		110 GHz
Insertion Loss		1.5 dB	
Return Loss	10 dB	15 dB	
Power Handling (CW/PK)		15 W / 1 kW	30 W / 2.5 kW
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

#### Mechanical Specifications:

Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Flange
Min. Centerline Bend Radius (E Plane)	100°/in
Min. Centerline Bend Radius (H Plane)	50°/in
Max Pressure	20 lb/in <sup>2</sup>
Max Torsion	0 psi
Compression/Elongation	0.05"/in
Insertion Length	2" (50.8 mm)
Material	Brass
Flange Finish	Nickel Plated
Waveguide Finish	Silver Plated
Waveguide Jacket Material	Polysulfide Rubber
Outline	WG-FW-F-L

#### ECCN

EAR99

#### FEATURES

- High Quality
- Flexible Bending
- Comparable Cost to the Rigid Waveguide

#### APPLICATIONS

- Communication Systems
- Test Instrumentations
- Sub-assemblies

#### SUPPLEMENTAL DETAILS



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



**NOTE:**  
LENGTH "L" IS CUSTOMIZABLE

**NOTE:**

- 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.
- Flexible Waveguide Assemblies are fragile and must be afforded careful handling to avoid damage - No torsional stresses are allowed.

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MAKING MILLIMETERWAVE ACCESSIBLE