

## WR-05 Proxi-Flange™ Contactless Flange Straight Waveguide Section, 2.0"

**STQ-WG-05020-FB-CF** is an Eravant trademarked Proxi-Flange™, patented, with a G-Band contactless flange straight waveguide section with WR-05 waveguides and UG-387/U-M compatible anti-cocking flanges. The Proxi-Flange™ is constructed with a special waveguide flange populated with an array of small pin-like structures to realize the RF choking actions. The Proxi-Flange™ avoids the problem of poor return loss and high insertion loss caused by imperfect contact when two waveguide flanges are mated. The captive screws normally used in waveguide test sets can cause cocking issues if tightened unevenly, but Proxi-Flange™ eliminates the need for any waveguide screws, resulting in improved device durability, measurement consistency, and test repeatability. Eravant's Wave-Glide™, patented, fixture - the Novel Apparatus of Millimeter-Wave Frequency for Accurate and Automatic Testing, further enhances the Proxi-Flange™ benefits and makes it the perfect candidate for volume production and automatic test lines where frequent connection and disconnection between DUTs and test equipment occurs. Model STQ-WG-05020-FB-CF is offered to cover the frequency range of 140 to 220 GHz with an insertion length of 2.0". Other insertion lengths and other frequency bands are offered under various model numbers to cover frequency ranges from 18 to 325 GHz.

### Electrical Specifications:

| Parameter                 | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency Range           | 140 GHz |         | 220 GHz |
| Insertion Loss            |         | 4.4 dB  |         |
| Return Loss               |         | 25 dB   |         |
| Specification Temperature |         | +25°C   |         |
| Operating Temperature     | -40°C   |         | +85°C   |

### Mechanical Specifications:

| Item             | Specification  |
|------------------|--|
| Waveguide Size   | WR-05 Waveguide with UG-387/U-M Compatible Anti-Cocking Flange |
| Insertion Length | 2.0"   |
| Material         | Beryllium Copper (BeCu)  |
| Finish           | Gold Plated  |
| Weight           | 1.4 Oz   |
| Outline          | WG-FG-A-CF-L   |



### ECCN

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### FEATURES

- Frequency Range: 140 to 220 GHz
- Contactless Connection
- Rugged Waveguide Configuration
- Low Insertion Loss
- High Return Loss

### APPLICATIONS

- Test Instrumentation
- Automatic Test Setup
- Volume Production Testing

### SUPPLEMENTAL DETAILS



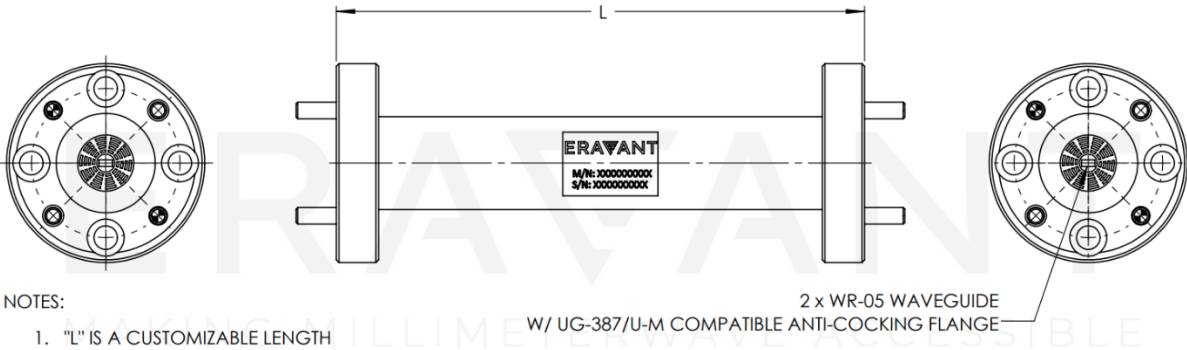
STQ-WG-05020-FB-CF

Components Included in Each Kit:

| Item                                 | Eravant Number     | Quantity    |
|--------------------------------------|--------------------|-------------|
| Waveguide Screws, 3/32 Hex Head      | SWH-332-SS-10      | (10 Pieces) |
| Contactless Flange                   | STQ-WG-05020-FB-CF | 1 Piece     |
| Waveguide Screwdriver, 3/32 Hex Head | SWH-332-DS         | 1 Piece     |
| USB Flash                            | -                  | 1 Piece     |
| Black Test Equipment Case            | -                  | 1 Piece     |

Mechanical Outline:

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



NOTE:

- On condition 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 case temperature.
- Other mechanical configurations with different lengths and other frequency bands are available under different model numbers.
- The **Proxi-Flange™** family is a trademarked and patented product of Eravant.
- Eravant 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.