

WR-42 Proxi-Flange™ Contactless Flange Straight Waveguide Section

STQ-WG-42025-FB-CF is an Eravant trademarked Proxi-Flange™, patented, with a K-band contactless flange straight waveguide section with WR-42 waveguides and UG-595/U flanges. The ProxiFlange™ 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 ProxiFlange™ 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-42025-FB-CF is offered to cover the frequency range of 18 to 26.5 GHz with an insertion length of 2.5". 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	18 GHz		26.5 GHz
Insertion Loss		1.0 dB	
Return Loss		30 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Waveguide Size	WR-42 Waveguide with UG-595/U Flange
Insertion Length	2.5"
Flange Material	Beryllium Copper(BeCu)
Waveguide Material	Beryllium Copper(BeCu)
Finish	Gold Plated
Weight	2.4 Oz
Outline	WG-FK-CF



ECCN

- EAR99

FEATURES

- Frequency Range: 18 to 26.5 GHz
- Contactless Connection
- Rugged Waveguide Configuration
- Low Insertion Loss
- High Return Loss

APPLICATIONS

- Test Instrumentation
- Automatic Test Setup
- Volume Production Testing

RECOMMENDED PAIRINGS

- Cal-kit: [STQ-TO-42-S1-CKIT1](#)
- [Wave-Glide™ Rail System](#)
- [Waveguide Quick Connects](#)



STQ-WG-42025-FB-CF

APPENDIX: CONTACTLESS FLANGE CASE AND FRONT VIEW



STQ Contactless Flange Front View



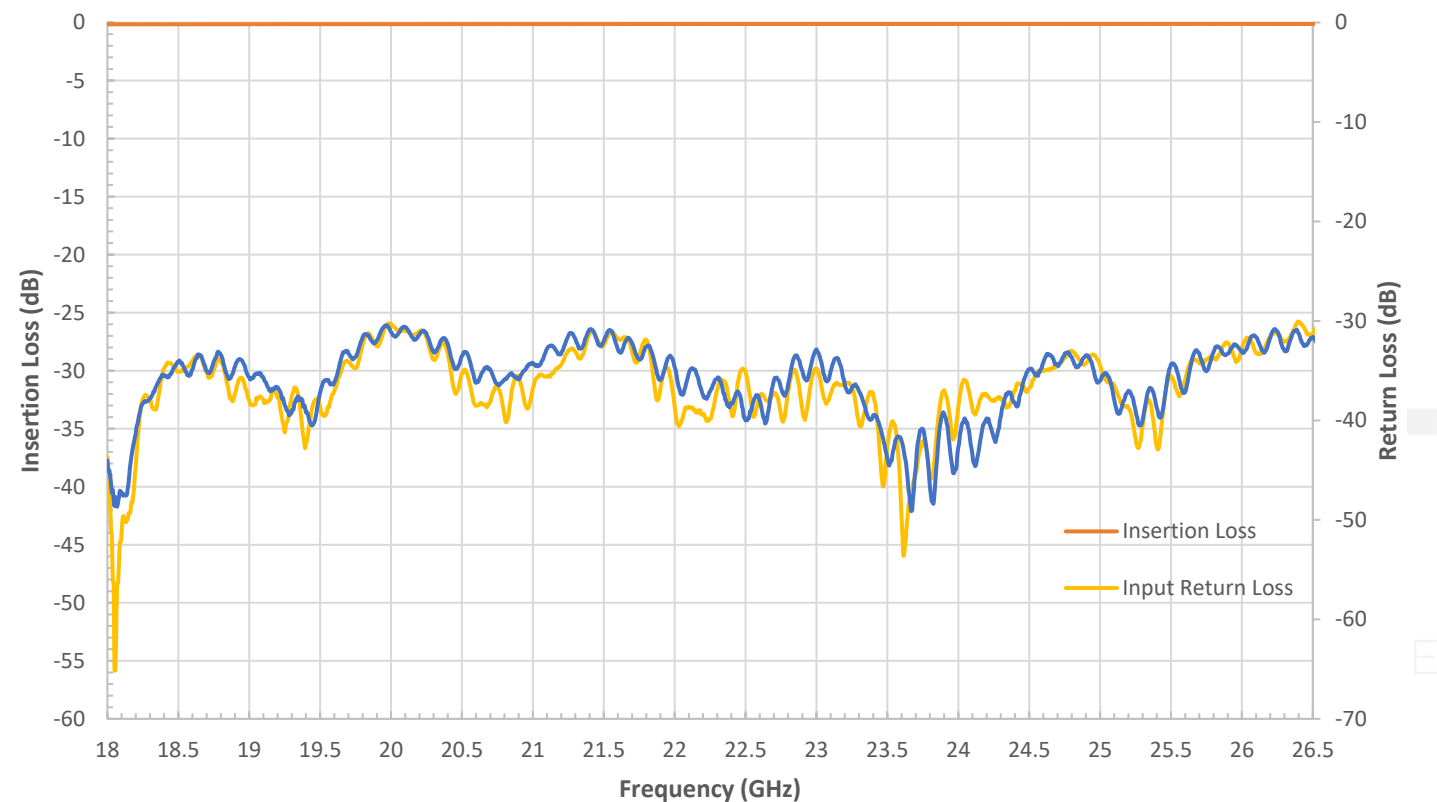
STQ Case Outside View



STQ Case Inside View

APPENDIX: TYPICAL PERFORMANCE

Measured Insertion Loss and Return Loss vs. Frequency



ERAVANT
MAKING MILLIMETERWAVE ACCESSIBLE