

2.92 mm (F) to 2.92 mm (F) Coaxial Rotary Joint, DC to 40 GHz

SCN-KFIKFI-U3 is a 2.92 mm (K) female to 2.92 mm (K) female coaxial rotary joint that covers the frequency range of DC to 40 GHz. The rotary joint provides consistently low insertion loss throughout its rotation and uses high precision bearings to ensure smooth mechanical rotation. The impedance of the rotary joint is 50 Ohms. Other configurations are available under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		40 GHz
Insertion Loss @ DC-18 GHz		0.6 dB	
Insertion Loss @ 18-32 GHz		1.0 dB	
Insertion Loss @ 32-40 GHz		1.2 dB	
Return Loss @ DC-18 GHz		16 dB	
Return Loss @ 18-32 GHz		13 dB	
Return Loss @ 32-40 GHz		10 dB	
Impedance		50 Ω	
Power Handling @ 1 GHz (Average)			20 W
Power Handling @ 1-4 GHz (Average)			10 W
Power Handling @ 4-10 GHz (Average)			5 W
Power Handling @ 10-18 GHz (Average)			2 W
Power Handling @ 18-40 GHz (Average)			1 W
Peak Power Handling @ 1 GHz			2000 W
Rotation Speed			200 rpm
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+70 °C

ECCN

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FEATURES

- Low Insertion Loss
- In-line Port configuration

APPLICATIONS

- Radar System
- Test Equipment
- Sub-assemblies
- Antenna Range

SUPPLEMENTAL DETAILS

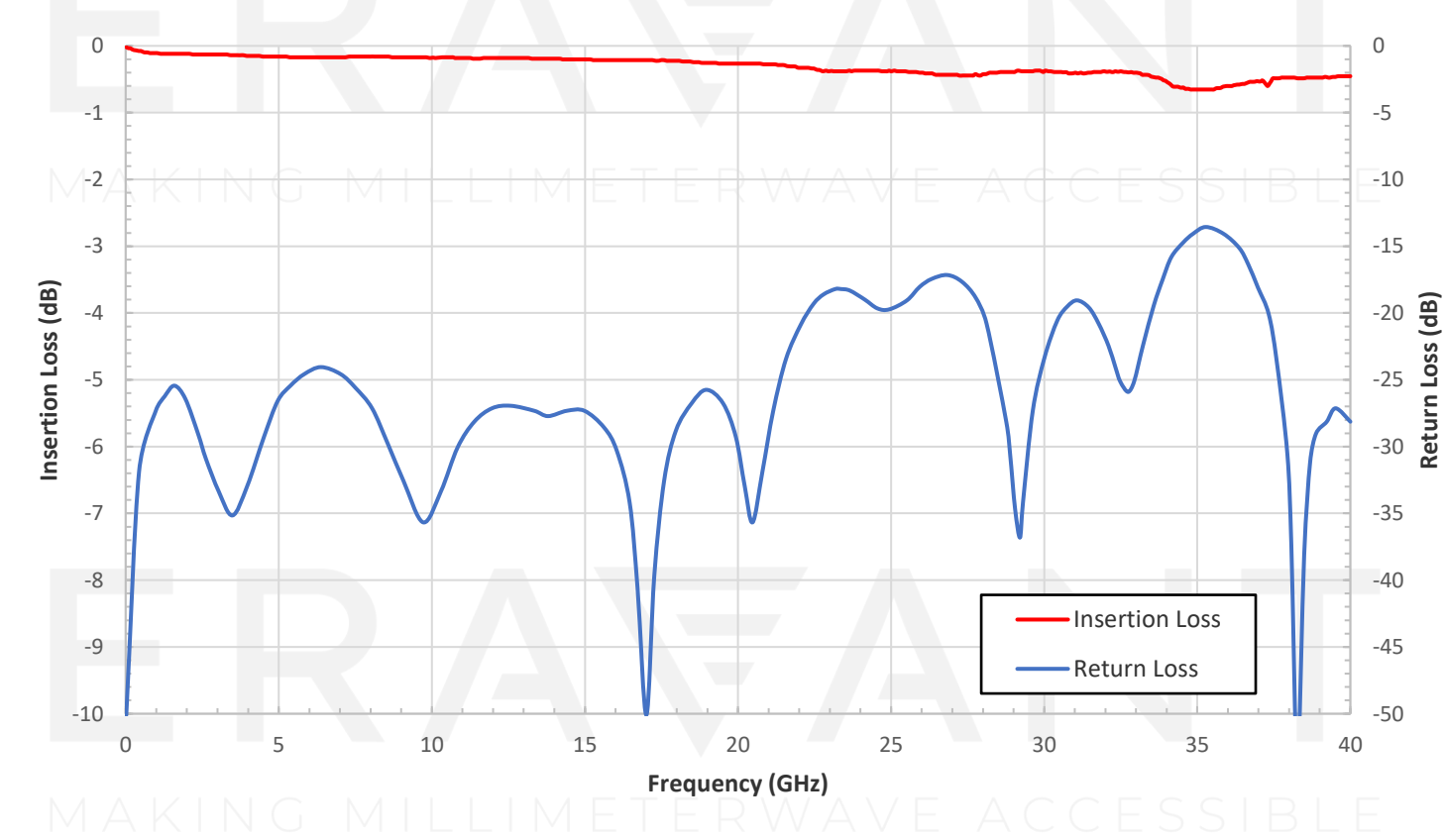


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Mechanical Specifications:

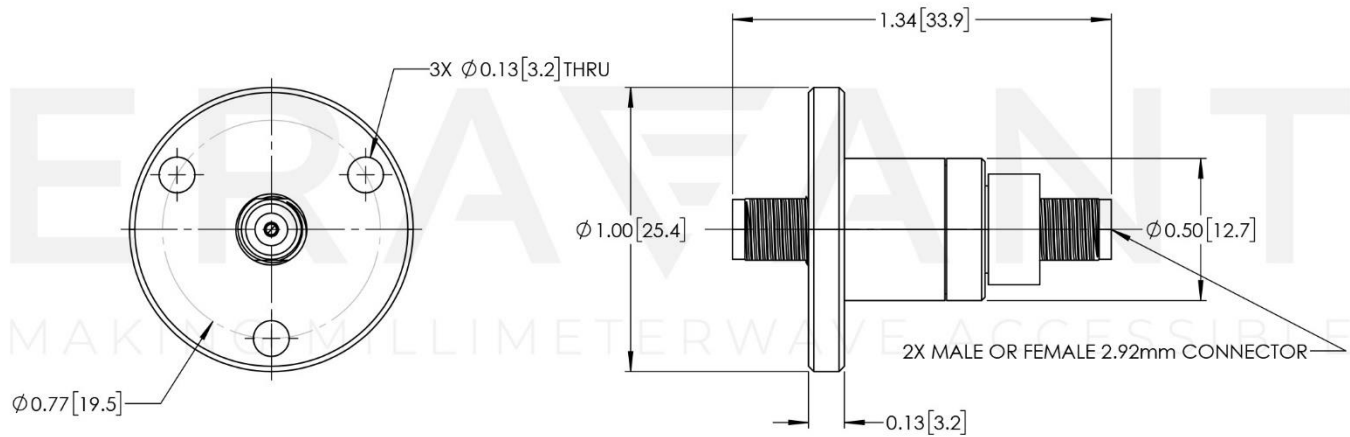
Item	Specification
Connector 1 Type	2.92 mm (K) Female
Connector 2 Type	2.92 mm (K) Female
Body Material	Stainless Steel
Body Finish	Passivated
Contact Material	Beryllium Copper, Gold Plated
Weight	1.1 Oz
Dimensions	1.34" (L) x 1.00" (D)
Outline	CN-KFIKFI-SZ1

Typical Performance vs. Frequency



SCN-KFIKFI-U3

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 slightly from unit to unit.
- All testing is performed under +25 °C case temperature.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- 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.