

NMD 2.92 mm (F) to 2.92 mm (M) Economy VNA Test Cable, Flexible, 38"

STQ-CW-KFKM038-F2-EG is a 38" long, cost effective, instrumentation grade, flexible, armored coaxial cable with a NMD 2.92 mm female and a 2.92 mm male connector that covers the frequency range of DC to 40 GHz. The cable is especially designed and manufactured for VNA applications. The typical amplitude and phase stabilities at 40 GHz are \pm 0.05 dB and \pm 3.5° at a bending radius of 4.9", respectively. The coaxial cable utilizes the highest quality test instrumentation grade cable and a precision manufacturing process to guarantee superior microwave performance and mechanical durability. The impedance of the cable is 50 ohms. This model and other models, such as **STQ-CW-KFKF038-F2-EG**, may form a VNA test cable pair for custom test set applications. Other connector type combinations and lengths are offered under different models.



Electrical Specifications:

| Parameter | Minimum | Typical | Maximum |
|-------------------------------|---------|----------------------|-----------|
| Frequency Range | DC | | 40 GHz |
| Insertion Loss @ DC to 20 GHz | | 2.4 dB | |
| Insertion Loss @ 20 to 30 GHz | | 2.9 dB | |
| Insertion Loss @ 30 to 40 GHz | | 3.3 dB | |
| Return Loss | | 19 dB | |
| Phase Stability* | | ± 3.5° | |
| Amplitude Stability* | | $\pm~0.05~\text{dB}$ | |
| Impedance | | 50 Ω | |
| Breakdown Voltage | | | 500 Volts |
| Radiation Shielding | | 90 dB | |
| Specification Temperature | | +25 °C | |
| Operating Temperature | -40 °C | | +85 °C |

^{*}When wrapped (360°) around a 4.9" (124.5 mm) radius mandrel.

ECCN

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FEATURES

- High Performance
- · Economy Armored
- Flexible
- Stable and Reliable

APPLICATIONS

- Test Lab
- VNA

SUPPLEMENTAL DETAILS





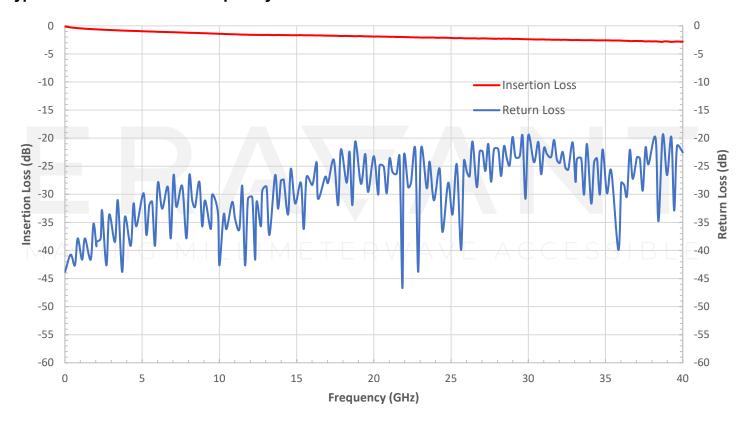


Mechanical Specifications:

| Item | Specification | |
|-------------------------------------|---|--|
| Connectors 1 | NMD 2.92 mm Female | |
| Connectors 2 | 2.92 mm Male | |
| Minimum Bending Radius | 1.25" | |
| Connector Contact Material | Beryllium Copper (BeCu)/ Gold Plating per MIL-G-45204 | |
| Connector Material | Passivated Stainless Steel | |
| Cable Dielectric | ePTFE | |
| Inner / Outer Cable Jacket Material | FEP / Stainless Steel Braid and PTFE | |
| Cable Outer Diameter | 0.240" | |
| Length | 38" | |
| Outline | CW-NKK-F10-EG-V | |

MAKING MILLIMETERWAVE ACCESSIBLE

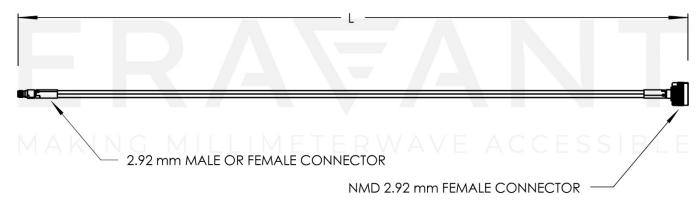
Typical Performance vs. Frequency





Mechanical Outline:

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



NOTE:

LENGTH "L" IS CUSTOMIZABLE

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:

- Bending the cable sharply will either cause damage or degrade the performance of the cable.
- Proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

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