

# 1.85 mm (M) to 1.85 mm (M) Coaxial Cable, Super Bendable, 3", Phase Matched

**SCW-VMVM003-M1-PM** is a 3" long, Super Bendable, phase matched coaxial cable with 1.85 mm (V) male connectors that covers the frequency range of DC to 60 GHz. The coaxial cable, which is hand formable with good bendability, can be bent from the root of the connectors. It utilizes high performance material and a precision manufacturing process to guarantee superior microwave performance and mechanical durability. The impedance of the cable is 50 ohms. Other lengths are offered under different models.



## **Electrical Specifications:**

| Parameter                  | Minimum | Typical     | Maximum  |
|----------------------------|---------|-------------|----------|
| Frequency Range            | DC      |             | 60 GHz   |
| Insertion Loss @ 18 GHz    |         | < 0.5 dB    |          |
| Insertion Loss @ 26.5 GHz  |         | < 0.8 dB    |          |
| Insertion Loss @ 40 GHz    |         | < 1.0 dB    |          |
| Insertion Loss @ 60 GHz    |         | < 1.5 dB    |          |
| Return Loss @ 60 GHz       |         | 16 dB       |          |
| Impedance                  |         | $50~\Omega$ |          |
| Phase Match (Unit to Unit) |         | ± 10°       |          |
| Breakdown Voltage          |         |             | 500 V    |
| Radiation Shielding        |         | 90 dB       |          |
| Velocity Factor            |         | 76%         |          |
| Power Handling @ 60 GHz    |         |             | 8 W (CW) |
| Specification Temperature  |         | +25 °C      |          |
| Operating Temperature      | -40 °C  |             | +85 °C   |

## **ECCN**

EAR99

## **FEATURES**

- High Return Loss
- · Low Insertion Loss
- Hand-Formable
- Good Bendability
- Bendable from the Root of Connectors

### **APPLICATIONS**

- Test Lab
- Sub-Assemblies
- System Integration

### SUPPLEMENTAL DETAILS

MAKING MILLIMETERWAY

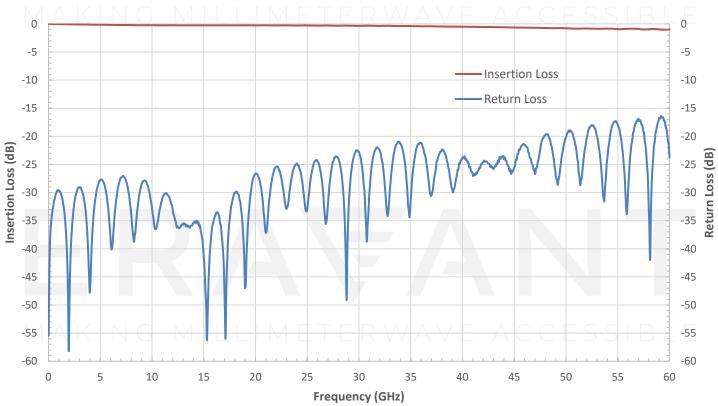




## **Mechanical Specifications:**

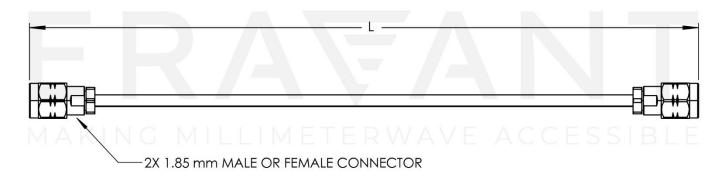
| Item                       | Specification                 |
|----------------------------|-------------------------------|
| Connectors                 | 1.85 mm (V) Male              |
| Connector Contact Material | Beryllium Copper, Gold Plated |
| Connector Material         | Passivated Stainless Steel    |
| Connector Dielectric       | PEI                           |
| Cable Dielectric           | PTFE                          |
| Cable Jacket               | FEP                           |
| Minimum Bending Radius     | 0.417"                        |
| Cable Outer Diameter       | 0.104"                        |
| Length                     | 3"                            |
| Outline                    | CW-VV-M8                      |

## Typical Performance vs. Frequency





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



## NOTE:

LENGTH "L" IS CUSTOMIZABLE

### NOTE:

- Length "L" can be customizable.
- 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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