

## 3.5 mm (F) Coaxial Matching Load, 0.5 Watt, Metrology Grade

## **Description:**

**Model STQ-CM-3F27-U2** is a metrology grade 3.5 mm female coaxial matching load that covers the frequency range of DC to 26.5 GHz. The coaxial matching load exhibits a typical return loss of 30 dB. It is designed and manufactured to offer a good match for system applications. The



characteristic impedance of the matching load is 50 Ohms and the power handling is 0.5 watt. The male version is available under the model number SCM-3M27-U2.

### **Features:**

- Metrology Grade
- High Return Loss
- 50 Ohms

## **Applications:**

- Test Lab
- Sub-assemblies
- System Integration

## **Electrical Specifications:**

| Parameter                 |                  | Minimum | Typical | Maximum    |
|---------------------------|------------------|---------|---------|------------|
| Frequency                 |                  | DC      |         | 26.5 GHz   |
| Return Loss               | @ DC to 15 GHz   |         | 30 dB   |            |
|                           | @ 15 to 26.5 GHz |         | 25 dB   |            |
| Impedance                 |                  |         | 50 Ω    |            |
| Power Handling            |                  |         |         | 0.5 W (CW) |
| Specification Temperature |                  |         | +25 °C  |            |
| Operating Temperature     |                  | -40 °C  |         | +85 °C     |

# **Mechanical Specifications:**

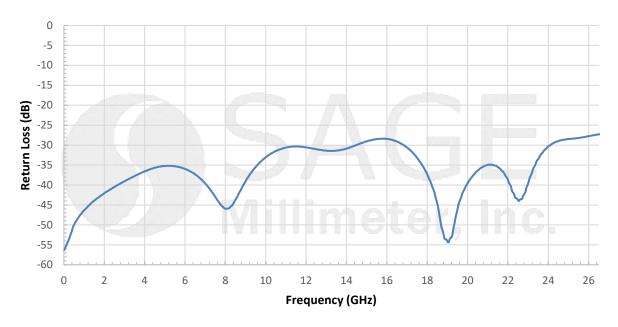
| Item           | Specification   |  |  |
|----------------|-----------------|--|--|
| Connector Type | 3.5 mm Female   |  |  |
| Material       | Stainless Steel |  |  |
| Finish         | Gold Plated     |  |  |
| Weight         | 0.60 Oz         |  |  |
| Length         | 1.0"            |  |  |
| Outline        | CM-3F-27-CE1    |  |  |



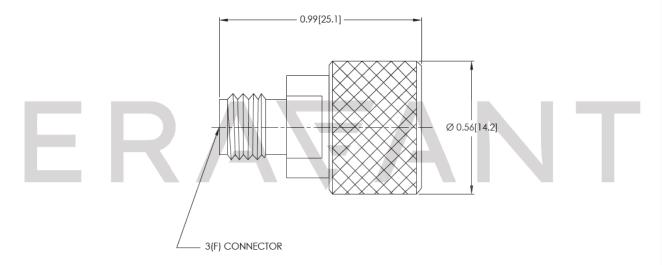
www.sagemillimeter.com | 3043 Kashiwa Street, Torrance, CA 90505 Phone: 424-757-0168 | Fax: 424-757-0188 | Email: sales@sagemillimeter.com

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## **Typical Return Loss vs. Frequency**



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



#### Note:

• SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter** torque wrench, model SCH-08008-S1, is highly recommended.



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