



## 2.4 mm (M) Coaxial Matching Load, 0.5 Watt, Metrology Grade

### Description:

**Model STQ-CM-2M27-U2** is a metrology grade 2.4 mm male coaxial matching load that covers the frequency range of DC to 40 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 female version is available under the model number SCM-2F27-U2.



### Features:

- Instrumentation Grade
- High Return Loss
- 50 Ohms

### Applications:

- Test Lab
- Sub-assemblies
- System Integration

### Electrical Specifications:

Parameter		Minimum	Typical	Maximum
Frequency		DC		40 GHz
Return Loss	@ DC to 15 GHz		35 dB	
	@ 15 to 25 GHz		40 dB	
	@ 25 to 40 GHz		25 dB	
Impedance			50 Ω	
Power Handling				0.5 W (CW)
Specification Temperature			+25 °C	
Operating Temperature		-40 °C		+85 °C

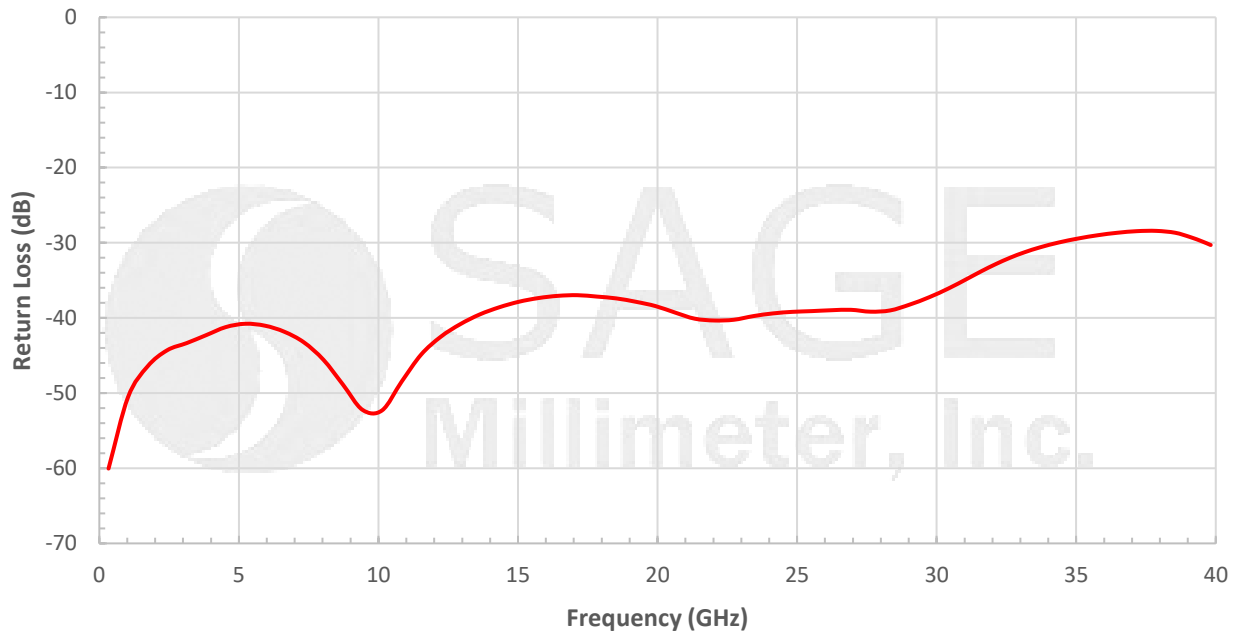
### Mechanical Specifications:

Item	Specification
Connector Type	2.4 mm Male
Material	Stainless Steel
Finish	Gold Plated
Weight	0.22 Oz
Length	0.78"
Outline	CM-2M-27-CE1

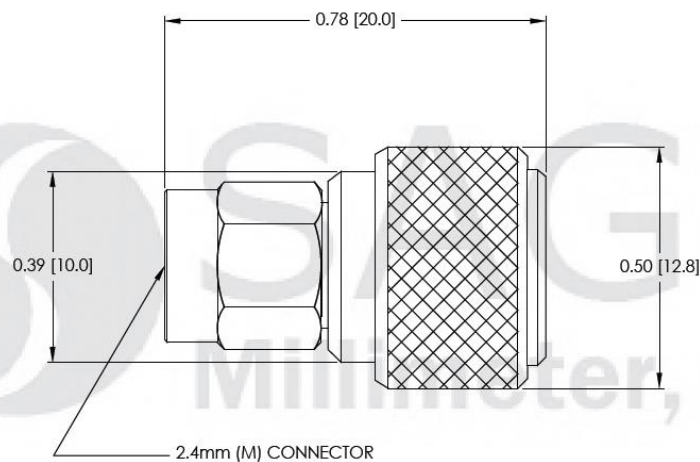


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### Typical Return Loss vs. Frequency



**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 unit to unit.
- All testing was performed under +25°C case temperature.
- 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-U3, is highly recommended.**



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