STQ-CM-1F27-U9

1.0 mm (F) Coaxial Matching Load, 0.5 Watt

STQ-CM-1F27-U9 is a metrology grade 1.0 mm female coaxial matching load that covers the frequency range of DC to 110 GHz. The coaxial matching load exhibits a typical return loss of 14 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 Watts. The male version is available under the model number STQ-CM-1M27-U9.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		110 GHz
Return Loss		14 dB	
Impedance		50 Ω	
Power Handling			0.5 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

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Item	Specification	
Connector Type	1.0 mm Female	
Material	Beryllium Copper	
Finish	Gold Plated	
Weight	0.23 Oz	
Length	0.83"	
Outline	CM-1F-27-1	

ECCN

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FEATURES

- Instrumentation Grade
- **Thermal Vacuum Safe**
- High Return Loss
- 50 Ohms

APPLICATIONS

- Test Lab
- Sub-assemblies
- System Integration •

SUPPLEMENTAL DETAILS



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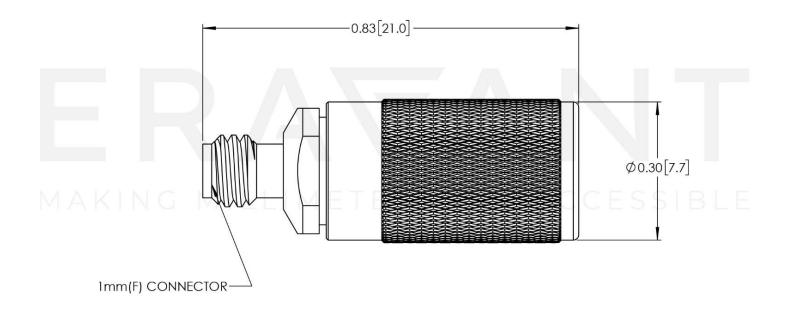
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0 -5 -10 -15 -20 Return Loss (dB) -25 -30 -35 -40 -45 -50 -55 -60 $50 \times 60^{\circ} \times 70^{\circ} \times 80^{\circ} \times 90^{\circ} \times 100^{\circ} \times 110^{\circ}$ 10 20 30 40 0 Frequency (GHz)

Typical Performance vs. Frequency

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



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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: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model <u>SCH-06004-S1</u> is highly recommended.

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