

## 1.0 mm (F) Coaxial Matching Load, 1 Watt

**SCM-1F30-UB** is a 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 13 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 1 Watt. The male version is available under the model number SCM-1M30-UB.



# **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		110 GHz
Return Loss		13 dB	
Impedance		50 Ω	
Power Handling (Average)*			1 W (CW)
Power Handling (Peak)*			5 W
Specification Temperature		+25 °C	
Operating Temperature	-55 °C		+125 °C

<sup>\*1</sup> W average to 25 °C ambient temperature, derated linearly to 0.1 W @ 125 °C

# **Mechanical Specifications:**

Item	Specification	
Connector Type	1.0 mm Female	
Material	Stainless Steel	
Finish	Passivated	
Weight	0.1 Oz	
Length	0.54"	
Outline	CM-1F-30-2	

## **ECCN**

EAR99

## **FEATURES**

- High Return Loss
- 50 Ohms

## **APPLICATIONS**

- Test Lab
- Sub-assemblies
- System Integration

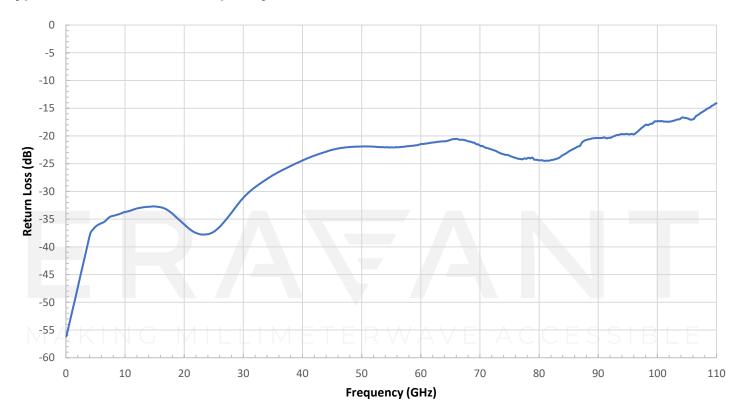
## **SUPPLEMENTAL DETAILS**



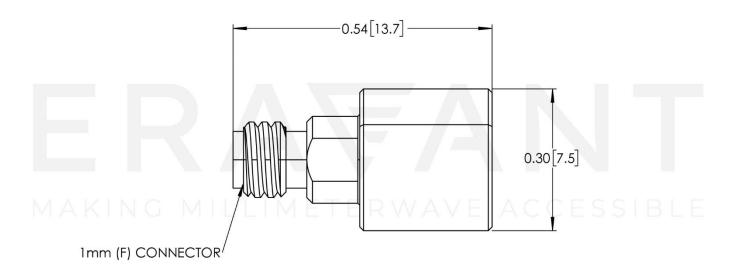
<sup>\*5</sup> W @ 5µs pulse width with maximum 1% duty cycle

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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 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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