#### SCT-2F2F-UB-B-V

### ERAWANT

#### 2.4 mm (F) to 2.4 mm (F) Hermetically Sealed Coaxial Adapter, Bulkhead

**SCT-2F2F-UB-B-V** is a 2.4 mm female to 2.4 mm female hermetically sealed bulkhead type coaxial adapter that covers the frequency range from DC to 50 GHz. The bulkhead adapter uses a glass bead and O-ring seal to provide a hermetically sealed RF interface between the vacuum and atmospheric environments. It is ideal for use as a coaxial RF feedthrough for testing in vacuum environments, such as a thermal vacuum chamber. It can also be used for other applications where an airtight vacuum seal is required. The bulkhead configuration gives mounting flexibility for a variety of mounting plates and flanges, such as ConFlat (CF) and KF vacuum flanges. Other configurations are available under different model numbers.

#### **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	DC		50 GHz
Insertion Loss		0.5 dB	
Return Loss		16 dB	
Impedance		50 Ω	
Hermetically (Leak Rate)	< 1 x 10 <sup>-8</sup> cc/sec of helium at 1 atm		
Specification Temperature		+25 °C	
Operating Temperature	-55 °C		+125 °C

#### **Mechanical Specifications:**

Item	Specification
Adapter Style	Bulkhead
Connector 1 Type	2.4 mm Female
Connector 2 Type	2.4 mm Female
Panel Wall Thickness	0.125" [3.2 mm] (max)
Body Material and Finish	Stainless Steel, Gold Plated
Contact Material and Finish	Beryllium Copper, Gold Plated
Inner Seal Body and Finish	Kovar, Gold Plated
Inner Seal Insulator	#7070 Glass (Corning)
O-ring Material and Size	Viton, 7 mm (ID) x 1 mm (CS)
Weight	0.2 Oz
Length	0.94"
Outline	CT-2F2F-B-V-LN1



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#### FEATURES

- DC to 50 GHz operation
- Bulkhead Style Configuration
- Glass Bead for Hermetic Sealing

#### **APPLICATIONS**

- Thermal Vacuum Chamber / Vacuum Environment Testing
- Hermetically Sealed Packages

#### SUPPLEMENTAL DETAILS



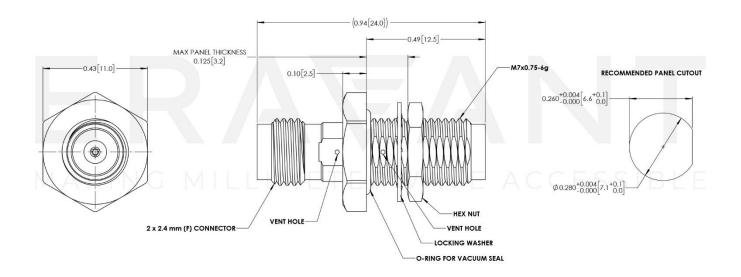
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0 0 -5 -5 -10 Insertion Loss -10 Return Loss -15 -15 -20 -20 Insertion Loss (dB) Return Loss (dB) -25 -25 -30 -30 -35 -35 -40 -40 -45 -45 -50 -50 -55 -55 -60 -60 5 10 15 20 25 30 35 40 50 0 45 Frequency (GHz)

#### **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: 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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