# SCT-EFEF-UB-B-V

# 1.35 mm (F) to 1.35 mm (F) Hermetically Sealed Coaxial Adapter, Bulkhead

**SCT-EFEF-UB-B-V** is a 1.35 mm female to 1.35 mm female hermetically sealed bulkhead type coaxial adapter that covers the frequency range from DC to 90 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		90 GHz
Insertion Loss		1.0 dB	
Return Loss		12 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	1.35 mm Female	
Connector 2 Type	1.35 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	0.89"	
Outline	CT-EFEF-B-V-LN1	





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#### **FEATURES**

- DC to 90 GHz operation
- Bulkhead Style Configuration
- Glass Bead for Hermetic Sealing

## **APPLICATIONS**

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

## SUPPLEMENTAL DETAILS



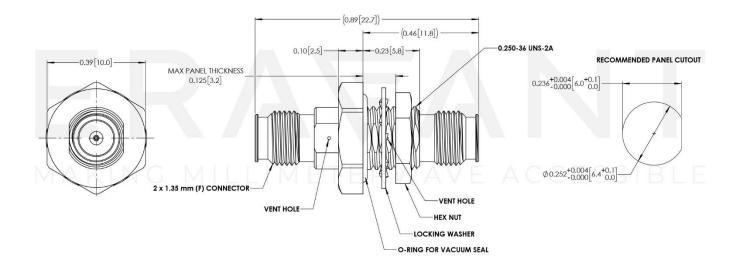
# SCT-EFEF-UB-B-V

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0 0 -5 -5 Insertion Loss -10 -10 Return Loss -15 -15 -20 -20 Insertion Loss (dB) -25 -30 -35 -35 -25 -30 -35 -40 -40 -45 -45 -50 -50 -55 -55 -60 -60 10 30 40 50 60 70 80 90 0 20 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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