

1.0 mm (F) to 1.0 mm (F) Hermetically Sealed Coaxial Adapter, Bulkhead

SCT-1F1F-UB-B-V is a 1.0 mm female to 1.0 mm female hermetically sealed bulkhead type coaxial adapter that covers the frequency range from DC to 110 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		110 GHz
Insertion Loss		1.0 dB	
Return Loss		13 dB	
Impedance		50 Ω	
Hermetically (Leak Rate)	< 1 x 10 ⁻⁸ 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	1.0 mm Female
Connector 2 Type	1.0 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	0.76"
Outline	CT-1F1F-B-LN1-V

ECCN

EAR99

FEATURES

- DC to 110 GHz operation
- Bulkhead Style Configuration
- Glass Bead for Hermetic Sealing

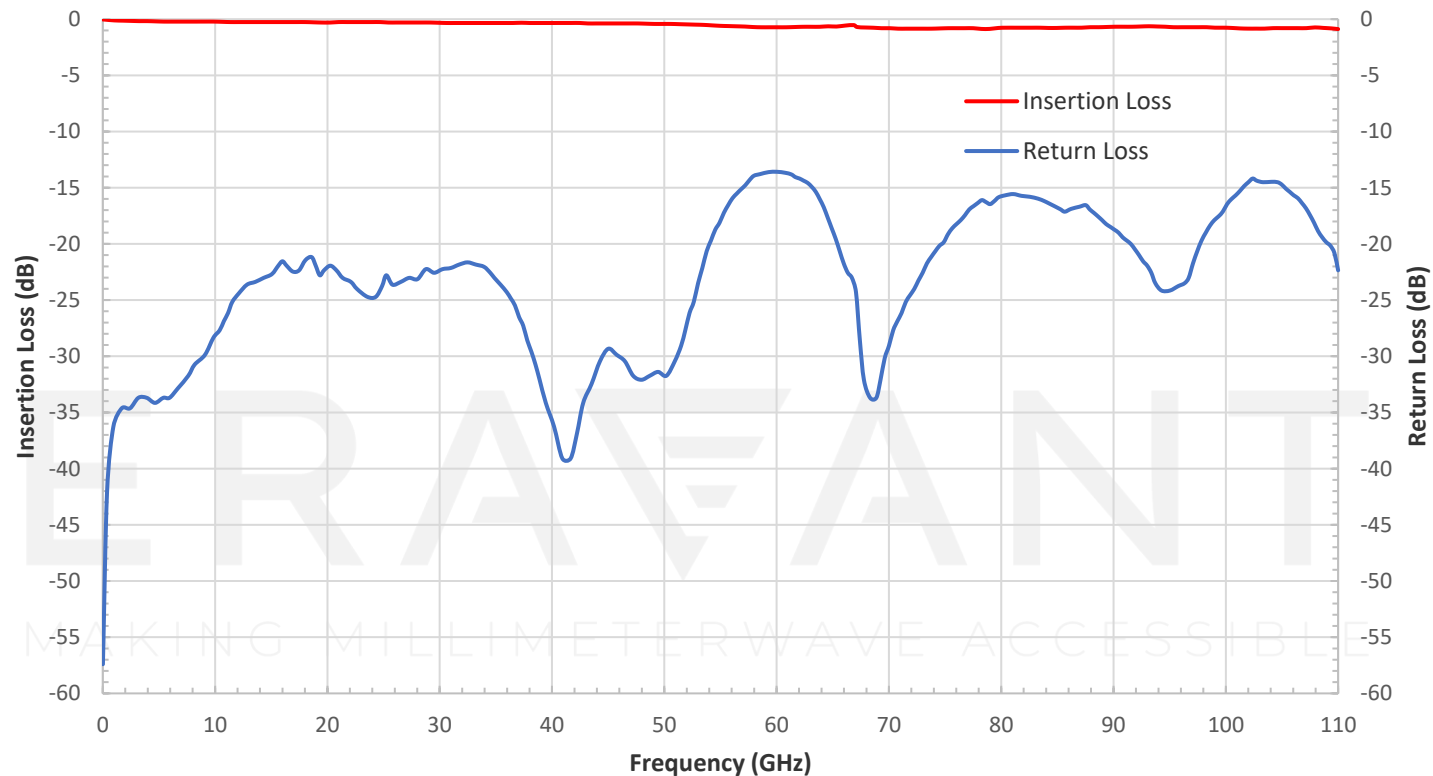
APPLICATIONS

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

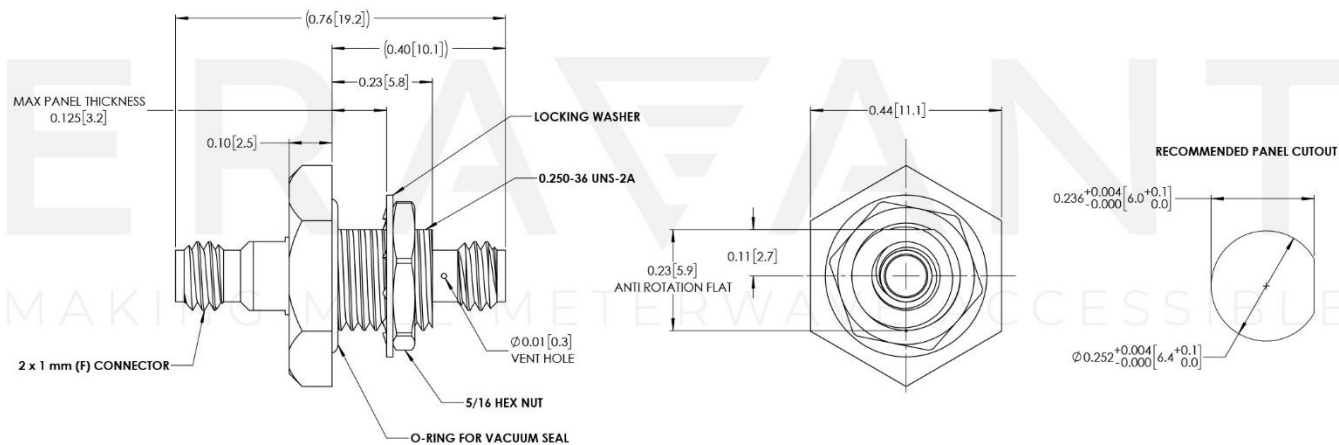
SUPPLEMENTAL DETAILS

SCT-1F1F-UB-B-V

Typical Performance 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 SCH-06004-S1 is highly recommended.

ERAVANT

MAKING MILLIMETERWAVE ACCESSIBLE

ERAVANT

MAKING MILLIMETERWAVE ACCESSIBLE