# DC - 65 GHz, Hermetically Sealed, Coaxial Adapters

# **DESCRIPTION**

"KPC185FFHA" is hermetically sealed 1.85 mm to 1.85 mm coaxial adapter that is:

- -Low SWR and low loss
- -Hermetic RF interface between vacuum and atmosphere environment
- -Small mounting space It is designed for broadband devices, instrument, and component testing applications.

### **SPECIFICATIONS**

#### Electrical:

Frequency Range DC - 65 GHz **SWR** < 1.5 < 0.7 dBInsertion Loss

**Electrical Length** Shown below (Nominal)

Temperature Range -55 to +125 °C

Mechanical:

Body and Outer Conductor Gold Plated Stainless Steel Inner Conductor Gold Plated Beryllium Copper

Inner and Outer Conductor for Seal Gold Plated Fe/Ni/Co Alloy (KOVAR)

Insulator for Seal #7070 Glass (Corning) Gasket for Flange Seal Fluoroelastomer "O" Ring Coupling Torque 90 N-cm (Nominal)

Connect/Disconnect Life > 1,000 Cycles

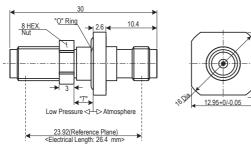
He Leak Rate (\*) < 1x10<sup>-10</sup> Pam<sup>3</sup>/sec (< 1x10<sup>-9</sup> atm cc /sec)



**Production Status** 4 Weeks Lead-Time for Shipping

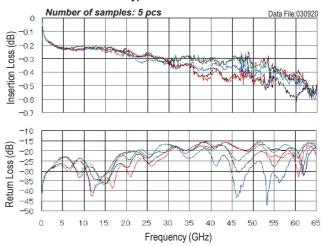
# TYPE: KPC185FFHA

1.85 mm Female/1.85 mm Female

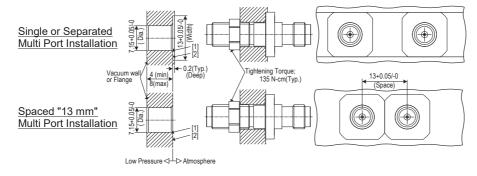


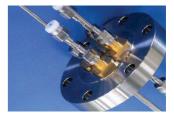
"T": Vacuum wall or flange thickness: 4 mm (min) to 8 mm (max)

# **Typical Performance**



# **Recommended Mounting Hole and Installation**





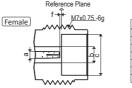
Example of 4 Adapters Mounted to 70 mm diameter. Vacuum Flange

## Interface Mating Dimensions of KPC185 (1.85 mm Connectors <\*>)

### NOTE:

All dimensions are in millimeters

- [1] Corners: < 0.05 x 0.05 mm
- [2] "Smooth surface" required
- (\*) As Per MIL-STD-883E, METHOD1014.10, Test Condition A4



KPC185(1.85 mm)

<\*> Matable with 2.4 mm connectors

**RoHS Compliant** 

**REACH Compliant** 

Specifications Subject to Change Without Notice

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