

# DC - 65GHz, Coaxial Adapters, Between-Series

## DESCRIPTION

The coaxial adapters between 1.85mm and SMPM are designed for broadband measurement, instrument and system use.

Interface standards ;  
1.85mm connector : IEEE-std-287

SMPM connector : MIL-STD-348A NOTICE 5  
328.1. SMPM female interface  
328-2. SMPM male full detent interface  
328-3. SMPM male smooth bore interface

## SPECIFICATIONS:

### Electrical:

Frequency Range DC - 65 GHz  
Return Loss (\*1) Better than 28dB (-20GHz)  
17dB (-50GHz)  
14dB (-65GHz)  
Insertion Loss(\*1) <0.25 dB (-20GHz)  
<0.50 dB (-50GHz)  
<0.85 dB (-65GHz)  
Phase error(\*1) Within +/- 1 ps  
(As aperture:10 % of sweep width)

Electrical Length 13.3 mm (typical)  
Temperature Range -55 to +125 deg.C

### Mechanical:

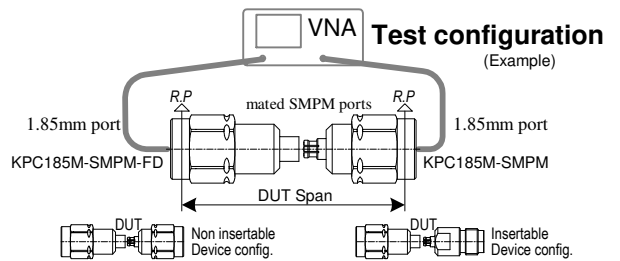
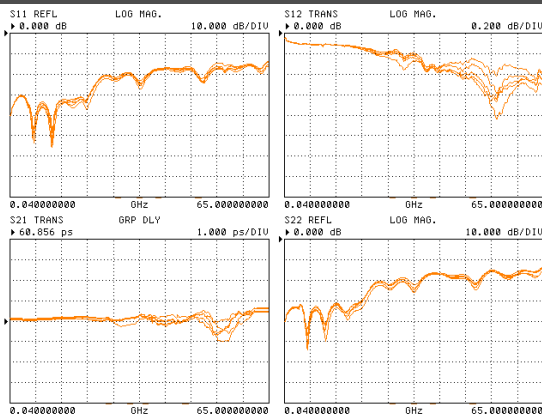
Coupling Torque : 90 N-cm(Nominal) for 1.85mm  
Mating cycles : >100 for Full Dtent, >500 for Smooth Bore  
Engage/ Disengage force:  
FD- 20 N/ 29 N max. ; SB- 11 N/ 8 N max.

### Materials:

Body and Outer Conductors:  
-Passivated Stainless steel and Gold Plated Beryllium Copper  
Inner Conductors:  
-Gold Plated Beryllium Copper and Brass

## Typical Performance

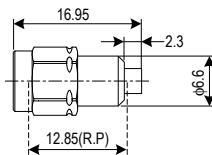
- Number of adapter pairs: 5



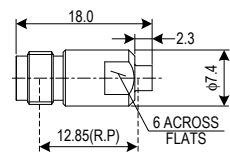
(\*1) As for the return loss, insertion loss and phase error of the adapters, SMPM ports are mated and 1.85mm ports are measured as a test interface.

## Full Detent

**TYPE:**  
**KPC185M-SMPM-FD**  
1.85mm Male/SMPM Male(FD)

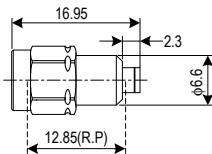


**TYPE:**  
**KPC185F-SMPM-FD**  
1.85mm Female/SMPM Male(FD)

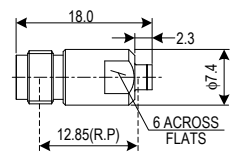


## Smooth Bore

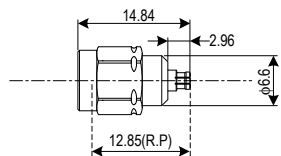
**TYPE:**  
**KPC185M-SMPM-SB**  
1.85mm Male/SMPM Male(SB)



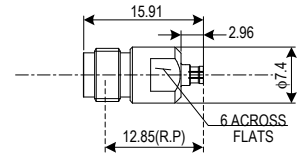
**TYPE:**  
**KPC185F-SMPM-SB**  
1.85mm Female/SMPM Male(SB)



**TYPE:**  
**KPC185M-SMPM**  
1.85mm Male/SMPM Female

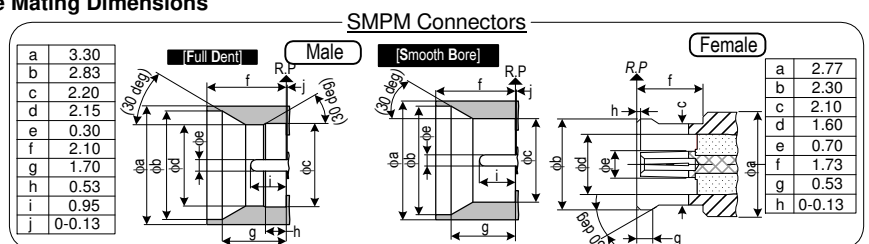
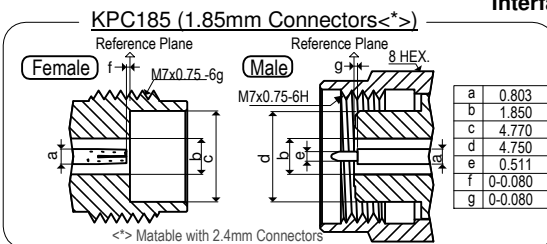


**TYPE:**  
**KPC185F-SMPM**  
1.85mm Female/SMPM Female



Note: All dimensions are in Millimeters.

## Interface Mating Dimensions



Specifications Subject to Change Without Notice.

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