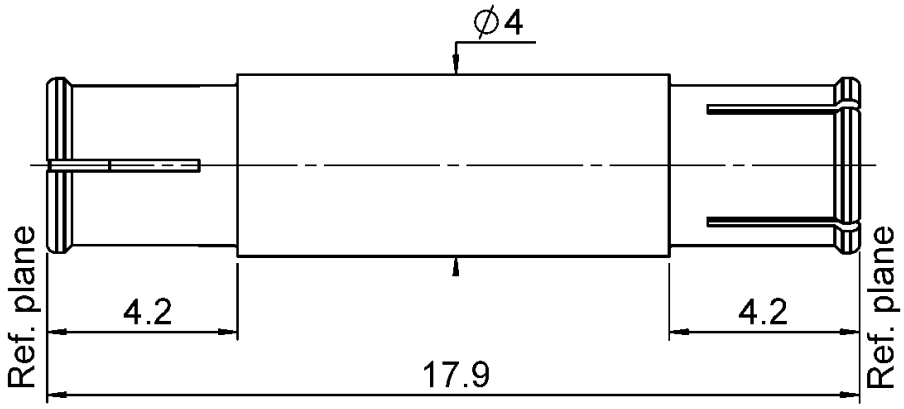
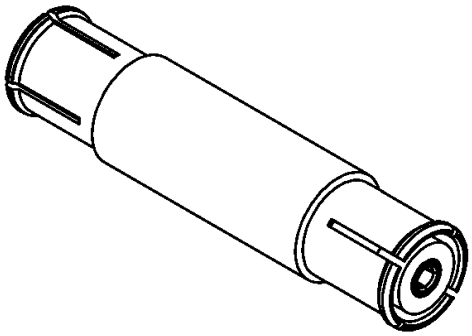
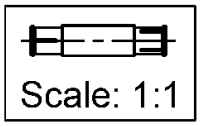
# Technical Data Sheet

STRAIGHT FEMALE-FEMALE ADAPTER

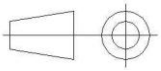
| PAGE 1/3 | ISSUE 18-11-16A | SERIES SMP-MAX | PART NUMBER R222M40127 |
|---|---|---|---|






All dimensions are in mm.



| COMPONENTS | MATERIALS | PLATING (µm) |
|---|---|---|
| Body | **BERYLLIUM COPPER** | **BBR** |
| Center contact | **BERYLLIUM COPPER** | **NPGR** |
| Outer contact | | |
| Insulator | **PTFE** | |
| Gasket | | |
| Others parts | | |
| - | - | - |
| - | - | - |

## PACKAGING

| Standard | Unit | Other |
|---|---|---|
| **100** | **Contact us** | **Contact us** |

## ELECTRICAL CHARACTERISTICS

| | | |
|---|---|---|
| Impedance | **50** | Ω |
| Frequency | **0 - 10** | GHz |

VSWR (max.) / Return Loss (max.)

| DC - 2 GHz | 2 – 4 GHz | 4 – 6 GHz |
|---|---|---|
| 1.07 / -30dB | 1.12 / -27dB | 1.14 / -24dB |

| | | |
|---|---|---|
| Insertion loss | **< 0.05*** | √F(GHz) dB |
| RF leakage - ( | **NA** | - F(GHz)) dB Maxi |
| Voltage rating | **335** | Veff Maxi |
| Dielectric withstanding voltage | **1000** | Veff mini |
| Insulation resistance | **5000** | MΩ mini |

## MECHANICAL CHARACTERISTICS

| | | |
|---|---|---|
| Center contact retention | | |
| Axial force – Mating End | **7** | N mini |
| Axial force – Opposite end | **7** | N mini |
| Torque | **NA** | N.cm mini |
| Radiall working range | **0.0000** | mm |

Warning: To ensure a blind mate assembly, please check the pull-in range of the mating receptacle.

| | | |
|---|---|---|
| Recommended torque | | |
| Mating | **NA** | N.cm |
| Panel nut | **NA** | N.cm |
| Mating life | **100** | Cycles mini |
| Weight | **0.8600** | g |

## ENVIRONMENTAL

| | | |
|---|---|---|
| Operating temperature | **-55/+165** | °C |
| Hermetic seal | **NA** | Atm.cm3/s |
| Panel leakage | **NA** | |

## SPECIFICATION

## OTHER CHARACTERISTICS

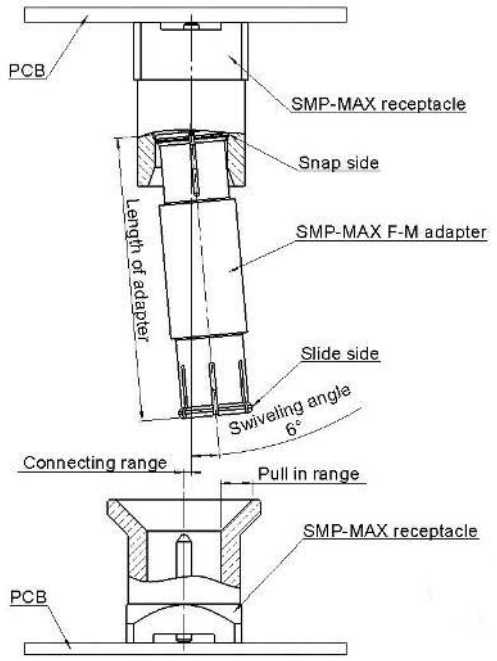
Assembly instruction: **NA**

Others:
*Coaxial Transmission Line Only
**Radial working angle: 3° min**
**Axial working range : 2mm**

**Because of the BBR plating, the typical values of the outer contact resistance may slightly differ compared to the NPGR plated adapters.**

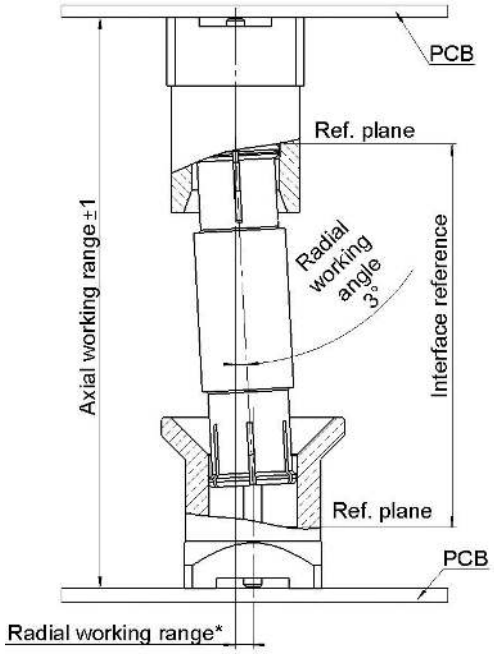
## GENERAL DATA OF SMP-MAX SERIE

SMP-MAX connecting range




The connecting range represents the maximum misalignment during connection.
The swiveling angle is the maximum possible angle of the adapter in a snap receptacle.
A blind assembly is guaranteed if radial misalignment is smaller than connecting range. Otherwise a manual lead-in is necessary.

SMP-MAX radial and axial working range




Electrical performance is achieved when radial and axial misalignments are within their working ranges.
Radial working range = (length of the adapter) x Sinus(radial working angle)

Typical RF performances for a set:
slide receptacle + adapter + snap receptacle (receptacles soldered on boards):

| | | | |
|---|---|---|---|
| V.S.W.R / Return loss | Misalignment | DC - 3 GHz | 3 - 6 GHz |
| | Radial 0°, Axial 0mm | <1.15/-23.9 dB | <1.25/-19.10 dB |
| | Radial 0°, Axial +/-1mm | <1.20/-20.8 dB | <1.35/-16.5 dB |
| | Radial 3°, Axial 0mm | <1.15/-23.1 dB | <1.25/-19.1 dB |
| | Radial 3°, Axial +/-1mm | <1.20/-20.8 dB | <1.35/-16.5 dB |
| Insertion loss | Misalignment | DC - 3 GHz | 3 - 6 GHz |
| | Radial 0°, Axial 0mm | <0.10 dB | <0.15 dB |
| | Radial 0°, Axial +/-1mm | <0.12 dB | <0.25 dB |
| | Radial 3°, Axial 0mm | <0.10 dB | <0.15 dB |
| | Radial 3°, Axial +/-1mm | <0.12 dB | <0.25 dB |
| handling power | >300W@2.7GHz at 25°C; >200W@2.7GHz at 85°C | | |