



All dimensions are in mm; tolerances according to ISO 2768 m-H

**Interface**

According to Rosenberger P-SMP

**Documents**

Application note AN001 "Calibration Services"

**Material and plating**

**Connector parts**

Center conductor  
Outer conductor  
Dielectric  
Substrate

**Material**

CuBe  
CuBe  
PEEK  
Al<sub>2</sub>O<sub>3</sub>

**Plating**

Gold, min. 1.27 µm, over nickel  
Gold, min. 1.27 µm, over nickel

**Electrical data**

Frequency range	DC to 10 GHz
Return loss	≥ 38 dB, DC to 4 GHz ≥ 26 dB, 4 GHz to 10 GHz
DC Resistance	50 Ω ± 0.25 Ω
Power handling	0.5 W

**Mechanical data**

Mating cycles	
- if mating part is Smooth bore, Catchers mitt	≥ 1000
- if mating part is Limited detent	≥ 500
- if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore, Catchers mitt	≤ 10 N
- Limited detent	≤ 45 N
- Full detent	≤ 68 N
Disengagement force	
- Smooth bore, Catchers mitt	≥ 2.2 N
- Limited detent	≥ 15 N
- Full detent	≥ 25 N
Gauge	0.00 mm to 0.05 mm

**General standard definitions**

For proper operation the vector network analyzer (VNA) needs a model describing the electrical behaviour of this calibration standard. The different models, units, and terms used will depend on the VNA type and they will have to be entered into the VNA. All values are based on typical geometry and plating.

Offset $Z_o$ / Impedance / $Z_o$	50 Ω
Offset Delay	00.000 ps
Length (electrical) / Offset Length	0.00 mm
Offset Loss	0.00 GΩ/s
Loss	0.0000 dB/√GHz

**Environmental data**

Operating temperature range <sup>1</sup>	+20 °C to +26 °C
Rated temperature range of use <sup>2</sup>	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C

RoHS compliant

<sup>1</sup> Temperature range over which these specification are valid.

<sup>2</sup> This range is underneath and above the operating temperature range, within the calibration load is fully functional and could be used without damage.