



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

Material

- CuBe
- CuBe or equiv.
- PS

Plating

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

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Electrical data

Frequency range	DC to 10 GHz
Return loss	≥ 30 dB, DC to 4 GHz ≥ 26 dB, 4 GHz to 10 GHz

Mechanical data

Mating cycles Plug side	≥ 100
Mating cycles Jack side	
- if mating part is Smooth bore	≥ 1000
- if mating part is Limited detent	≥ 500
- if mating part is Full detent	≥ 100
Engagement force	
- Smooth bore	10 N
- Limited detent	45 N
- Full detent	68 N
Disengagement force	
- Smooth bore	2.2 N
- Limited detent	15 N
- Full detent	25 N
Gauge	0.00 mm to 0.08 mm

General standard definition

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	71.6899 ps
Length (electrical) / Offset Length	21.50 mm
Offset Loss	2.51 G Ω /s
Loss	0.0156 dB/ $\sqrt{\text{GHz}}$

Environmental data

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

RoHS compliant

¹ Temperature range over which these specifications are valid.

² This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.

Declaration of calibration options

Factory Calibration

Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, **traceable to Rosenberger standards**, national / international standards are not available. Model based standard definitions are reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

Accredited Calibration

Not available.

For further, more detailed information see application note AN001 on the Rosenberger homepage.

Calibration interval

Recommendation 12 months

Packing

Standard 1 pce in box
Weight 7.5 g/pce

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							Page 3 / 3