



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

Interface

According to
Mechanically compatible with

IEC 61169-35
RPC-3.50 and SMA

Documents

Application note

AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor
Dielectric
Substrate

Material

CuBe
Stainless steel
PS
Al₂O₃

Plating

Gold, min. 1.27 µm, over nickel
Passivated

Electrical data

Frequency range	DC to 40 GHz
Return loss	≥ 42 dB, DC to 4 GHz ≥ 33 dB, 4 GHz to 18 GHz ≥ 30 dB, 18 GHz to 40 GHz
DC Resistance	50 Ω ± 0.25 Ω
Power handling	≤ 0.5 W

Mechanical data

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	0.90 Nm
Gauge	0.00 mm to 0.03 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	0.0000 ps
Length (electrical) / Offset Length	0.00 mm
Offset Loss	0.00 GΩ/s
Loss	0.0000 dB/√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 specification are valid.

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