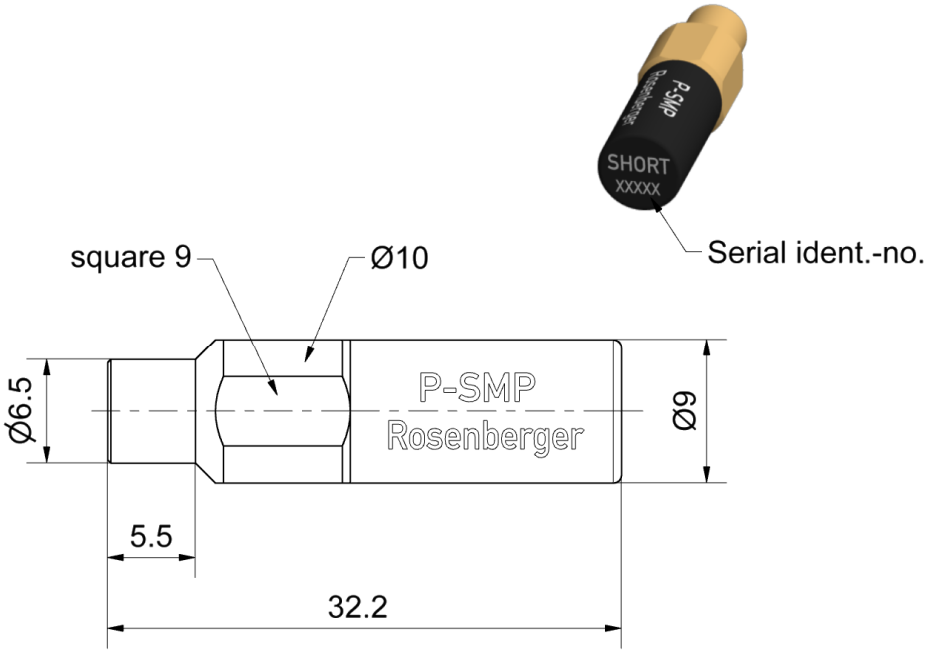
Technical Data Sheet		Rosenberger
P-SMP	Short Circuit Plug - full detent	**119S12S-000D3**



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	**Material**	**Plating**
Center conductor	CuBe	Gold, min. 1.27 µm, over nickel
Outer conductor	CuBe or equiv.	Gold, min. 1.27 µm, over nickel

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Electrical data

Frequency range	DC to 10 GHz
Return loss	≤ 0.15 dB, DC to 4 GHz ≤ 0.25 dB, 4 GHz to 10 GHz
Error from nominal phase[1]	≤ 2°, DC to 4 GHz ≤ 4°, 4 GHz to 10 GHz

[1] The nominal phase is defined by the Offset Delay, the Offset Loss and the Short Inductance

Mechanical data

Mating cycles	≥ 100
Engagement force:	
- Full detent	≤ 68 N
Disengagement force:	
- 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	26.018 ps
Length (electrical) / Offset Length	7.80 mm
Offset Loss	2.36 GΩ/s
Loss	0.0107 dB/$\sqrt{\text{GHz}}$
Short Inductance[2]	

[2] Short Inductances are determined individually for each Short circuit and are documented in a Calibration Certificate.

Environmental data

Operating temperature range[3]	+20 °C to +26 °C
Rated temperature range of use[4]	0 °C to +50 °C
Storage temperature range	- 40 °C to +85 °C
RoHS	compliant

[3] Temperature range over which these specification are valid.
[4] This range is underneath and above the operating temperature range, within the short circuit is fully functional and could be used without damage.

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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 individually optimized and 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	8.6 g/pce

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

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