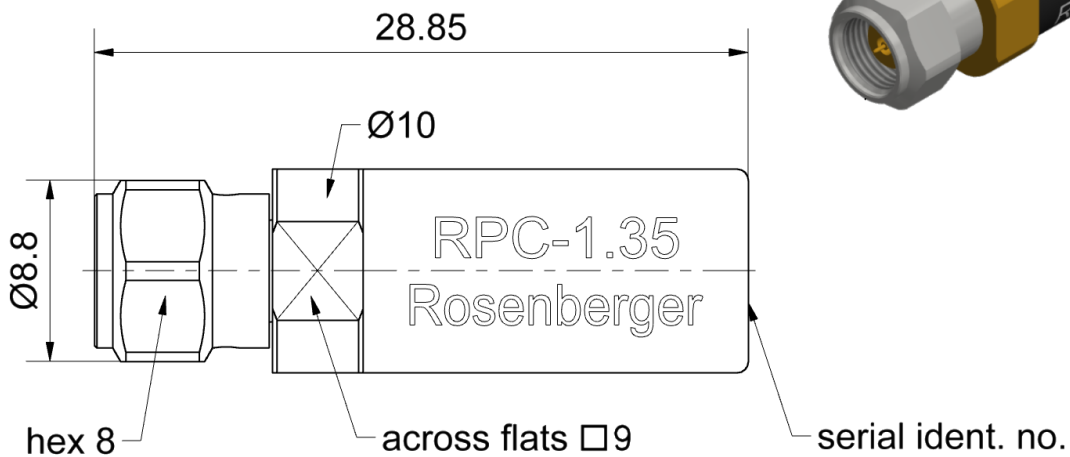


RPC-1.35 Calibration Load Plug

P9S150-C10D3



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

Interface

According to IEC 61169-65

Documents

Application note AN001 "Calibration Services"

Material and plating

Connector parts

- Center conductor
- Outer conductor
- Coupling nut
- Substrate

Material

- CuBe
- CuBe or equiv.
- Stainless steel
- Al₂O₃

Plating

- Gold, min. 1.27µm
- Gold, min. 1.27µm
- Passivated

Electrical data

Frequency range DC to 90 GHz

This calibration standard is designed to be part of a Rosenberger RPC-1.35 calibration kit, e.g. P9CK010-150 or P9CK001-150. Please consult the data sheet of one of the mentioned calibration kits for the specified Residual System Data in that application.

Return loss (typical values) ≥ 31 dB, DC to 10 GHz
 ≥ 25 dB, 10 GHz to 30 GHz
 ≥ 23 dB, 30 GHz to 40 GHz
 ≥ 20 dB, 40 GHz to 50 GHz
 ≥ 18 dB, 50 GHz to 90 GHz

DC Resistance $50 \Omega \pm 0.5 \Omega$

Power handling (at 25 °C, sea level) ≤ 0.5 W, derate by 0.005 W/K

Mechanical data

Mating cycles ≥ 3000
 Maximum torque 1.65 Nm
 Recommended torque 0.90 Nm
 Gauge 0.003 mm to 0.020 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_0 / Impedance / Z_0 50Ω
 Offset Delay 0.0000 ps
 Length (electrical) / Offset Length 0.00 mm
 Offset Loss 0.00 GΩ/s
 Loss 0.0000 dB/ $\sqrt{\text{GHz}}$

Environmental data

Operating temperature range¹ +20 °C to +26 °C
 Rated temperature range of use² 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 load is fully functional and could be used without damage.

RPC-1.35 Calibration Load Plug

P9S150-C10D3

Declaration of calibration options

Factory Calibration

Standard delivery for this calibration standard includes a Factory Calibration. In a Calibration Certificate individual calibration results, traceable to national / international standards are reported. Data based definitions of this calibration standard are delivered as a S1P-file.

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 7.0 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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Marcel Panicke	16.11.18	Lars Ramtke	06.04.22	c00	22-0672	David d'Argent	06.04.22

Rosenberger Hochfrequenztechnik GmbH & Co. KG
P.O.Box 1260 D-84526 Tittmoning Germany
www.rosenberger.de

Tel. : +49 8684 18-0
Email : info@rosenberger.de

Page
3 / 3