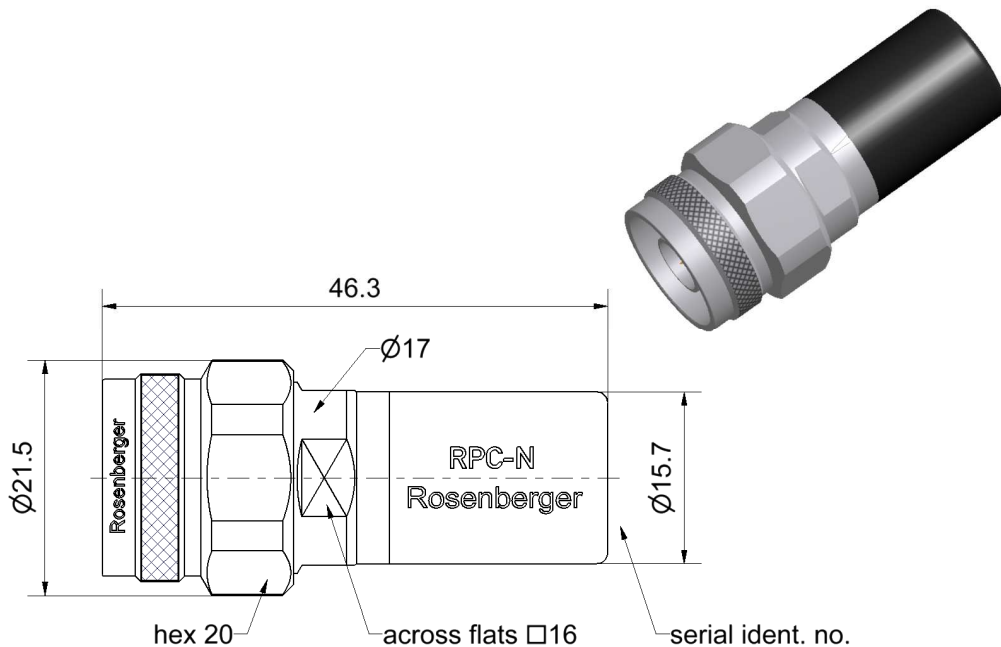


RPC-N
50 Ω

Open Circuit
Plug

05S12L-000S3



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

Interface

According to IEC 61169-16

Documents

Application note AN001 "Calibration Services"

Material and plating

Connector parts

Center conductor
Outer conductor
Coupling nut
Dielectric

Material

CuBe
Stainless steel
Stainless steel
PS

Plating

Gold, min. 1.27 μm, over nickel
Passivated
Passivated

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/09;14/6.2

Electrical data

| | |
|---------------------------------------|---|
| Frequency range | DC to 18 GHz |
| Return loss | ≤ 0.10 dB, DC to 4 GHz ≤ 0.15 dB, 4 GHz to 8 GHz ≤ 0.20 dB, 8 GHz to 18 GHz |
| Error from nominal phase ¹ | ≤ 1.5°, DC to 4 GHz ≤ 2.0°, 4 GHz to 8 GHz ≤ 3.0°, 8 GHz to 18 GHz |

¹ The nominal phase is defined by the Offset Delay, the Offset Loss and the Fringing Capacitances.

Mechanical data

| | |
|--------------------|--------------------|
| Mating cycles | ≥ 500 |
| Maximum torque | 1.70 Nm |
| Recommended torque | 1.10 Nm |
| Gauge | 5.28 mm to 5.32 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 | 50.3682 ps |
| Length (electrical) / Offset Length | 15.10 mm |
| Offset Loss | 0.80 GΩ/s |
| Loss | 0.0070 dB/√GHz |
| Fringing Capacitances ² | |

² Fringing Capacitances are determined individually for each open 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 open circuit is fully functional and could be used without damage.