

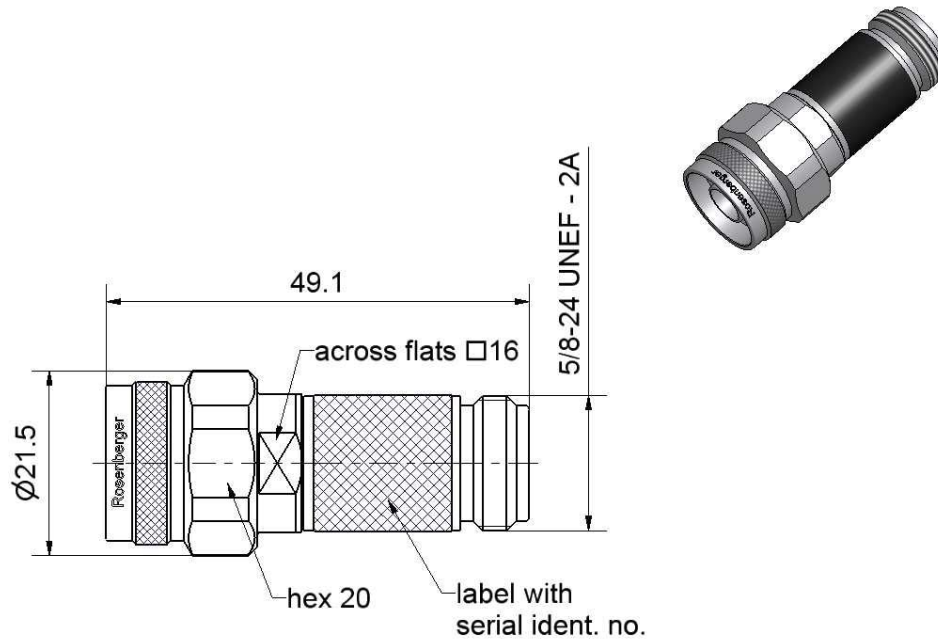
# Technical Data Sheet

# Rosenberger

RPC-N  
50 Ω

Attenuator  
Plug/Jack

## 05AS122-K40S3



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

### Interface

According to IEC 61169-16

### Documents

Application note AN001 "Calibration Services"

### Documentation

This Part is delivered with:

- **USB Stick**  
with S2p data file of the reference measurement values. Calibration Certificate as PDF file.
- **Calibration Certificate**  
Details see "Declaration of calibration" options.

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**05AS122-K40S3**

**Material and plating**

**Connector parts**

Center conductor - plug  
Center conductor - jack  
Outer conductor  
Coupling nut  
Dielectric  
Substrate

**Material**

CuBe  
CuBe  
Stainless steel  
Stainless steel  
PPE  
Al<sub>2</sub>O<sub>3</sub>

**Plating**

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

**Electrical data**

Frequency range DC to 18 GHz  
DC Resistance 50 Ω  
Power handling ≤ 0.5 W

**Electrical data (typical)**

Return loss ≥ 32 dB, DC to 4 GHz  
≥ 23 dB, 4 GHz to 18 GHz  
Attenuation 40 dB ± 0.5 dB, DC to 4 GHz  
40 dB ± 1.0 dB, 4 GHz to 18 GHz

**Mechanical data**

Mating cycles ≥ 500  
Maximum torque 1.70 Nm  
Recommended torque 1.10 Nm  
Gauge - plug 5.28 mm to 5.32 mm  
Gauge - jack 5.22 mm to 5.26 mm

**Electrical verification standard**

This Attenuator is designed as an electrical verification standard. Reference measurement values (calibration results) for transmission and reflection are included. Connected to a calibrated VNA the actual measured transmission and reflection values can be compared to the reference measurement values and the quality of the VNA calibration can be evaluated.

**Environmental data**

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

RoHS compliant

<sup>1</sup> Temperature range over which the reference measurement values are applicable.

<sup>2</sup> This range is underneath and above the operating temperature range, within the attenuator is fully functional and could be used without damage.

**Technical Data Sheet****Rosenberger**RPC-N  
50 ΩAttenuator  
Plug/Jack**05AS122-K40S3****Declaration of calibration options****Factory Calibration**

Standard delivery for this verification standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results. Reflection results are traceable to national / international standards. A S2p data file with the reference measurement values is included.

**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 68.0 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.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Kerstin Herzog	20.01.05	Markus Müller	12.10.16	h00	16-1390	Marion Striegler	12.10.16
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