

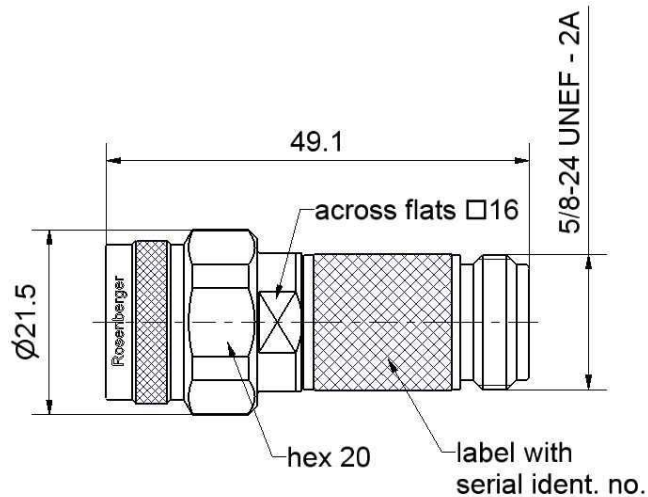
Technical Data Sheet

Rosenberger

RPC-N
50 Ω

Attenuator
Plug/Jack

05AS122-K20S3



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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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
Al₂O₃

Plating

Gold, min. 1.27 μ m, over nickel
Gold, min. 1.27 μ m, 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
 ≥ 26 dB, 4 GHz to 18 GHz
Attenuation 20 dB \pm 0.3 dB, DC to 4 GHz
20 dB \pm 0.5 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 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 the reference measurement values are applicable.

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

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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 59.0 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	g00	16-1390	Marion Striegler	12.10.16
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