



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

**Interface**

RPC-N according to  
RPC-SL

IEC 61169-16 ; CECC 22 210 ; MIL-STD 348A/402  
Interchangeable port connector system

**Documents**

N/A

**Material and plating**

**Connector parts**

- Center contact
- Outer contact RPC-N
- Outer contact RPC-SL
- Coupling nut
- Dielectric

**Material**

- CuBe
- Stainless steel
- Stainless steel
- Stainless steel
- PPE

**Plating**

- Gold, min. 1.27 µm, over chemical nickel
- Passivated
- Gold, 0.1 µm min.
- Passivated

# Technical Data Sheet

# Rosenberger

Adaptor  
RPC-N 50  $\Omega$  Plug – RPC-SL Plug

## 05S1P4-S0AS3

### Electrical data

|                                  |  |
|----------------------------------|--|
| Impedance                        | 50 $\Omega$                                |
| Frequency                        | DC to 18 GHz                               |
| Return loss                      | $\geq 21$ dB, DC to 18 GHz                 |
| Insertion loss                   | $\leq 0.05 \times \sqrt{f(\text{GHz})}$ dB |
| Insulation resistance            | $\geq 5$ G $\Omega$                        |
| Center contact resistance RPC-N  | $\leq 1.0$ m $\Omega$                      |
| Outer contact resistance RPC-N   | $\leq 1.0$ m $\Omega$                      |
| Center contact resistance RPC-SL | $\leq 3.0$ m $\Omega$                      |
| Outer contact resistance RPC-SL  | $\leq 2.0$ m $\Omega$                      |
| Test voltage                     | 750 V rms                                  |
| Working voltage                  | 250 V rms                                  |
| RF-leakage                       | $\geq 90$ dB up to 1 GHz                   |

### Mechanical data

|                            |                    |
|----------------------------|--------------------|
| Mating cycles RPC-N        | $\geq 500$         |
| Mating cycles RPC-SL       | $\geq 3000$        |
| Center contact captivation | $\geq 28$ N        |
| Coupling test torque RPC-N | 1.70 Nm            |
| Recommended torque RPC-N   | 0.70 Nm to 1.10 Nm |
| Recommended torque RPC-SL  | 2 Nm               |

### Environmental data

|                     |                               |
|---------------------|-------------------------------|
| Temperature range   | -40°C to +85°C                |
| Thermal shock       | IEC 61169-1, Subclause 9.4.4  |
| Corrosion           | IEC 61169-1, Subclause 9.4.6  |
| Vibration           | IEC 61169-1, Subclause 9.3.3  |
| Shock               | IEC 61169-1, Subclause 9.3.14 |
| Moisture resistance | IEC 61169-1, Subclause 9.4.3  |
| RoHS                | compliant                     |

### Tooling

N/A

### Suitable cables

N/A

### Packing

|          |              |
|----------|--------------|
| Standard | 1 pce in box |
| Weight   | 38.3 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          |
|--|----------|------------------|----------|------|---------------------------|--|---------------|
| Scherbauer M.  | 05.12.14 | Herbert Babinger | 01.08.17 | 300  | 17-v521                   | Frank Tatzel   | 01.08.17      |
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|  |          |                  |          |      |                           |  | Page<br>2 / 2 |