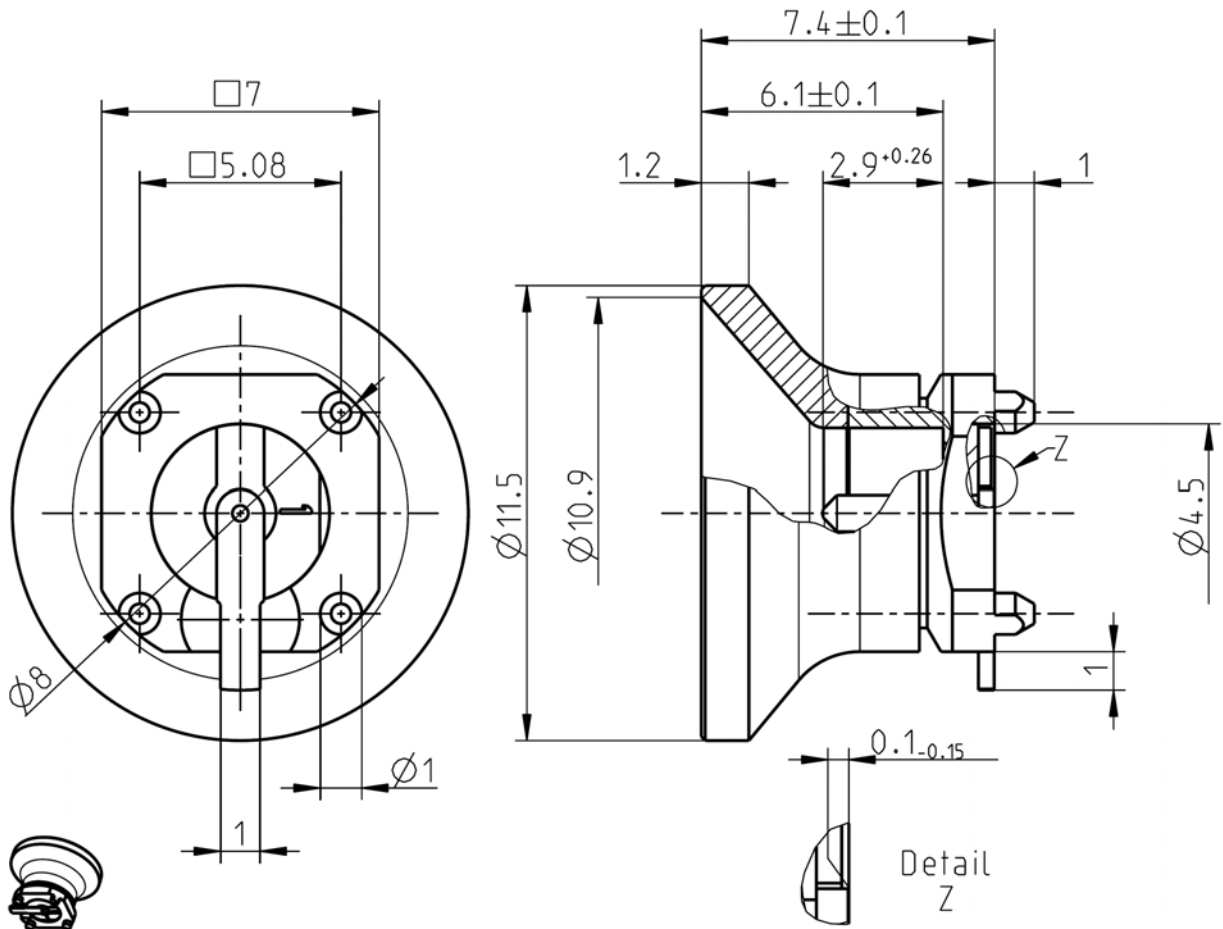


# TECHNICAL DATA SHEET

# Rosenberger

P-SMP STRAIGHT PLUG FOR PCB SMOOTH BORE

119S14N-40ML5



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

### Interface

According to

Rosenberger P-SMP

### Documents

Panel piercing

B 120c

### Material and plating

#### Connector parts

Center contact  
Outer contact  
Outer contact  
Dielectric

#### Material

Brass  
Brass  
Brass  
PEEK

#### Plating

AuroDur®, gold plated  
AuroDur®, gold plated  
Nickel, 2.5-5 µm

**TECHNICAL DATA SHEET****Rosenberger****P-SMP STRAIGHT PLUG FOR  
PCB SMOOTH BORE****119S14N-40ML5****Electrical data**

|   |   |
|---|---|
| Impedance                               | 50 Ω  |
| Frequency                               | DC to 10 GHz                                |
| Return loss                             | ≥ 30 dB, DC to 4 GHz<br>≥ 25 dB, 4 to 6 GHz |
| Insertion loss                          | ≤ 0.03 x √f(GHz) dB                         |
| Insulation resistance                   | ≥ 5 GΩ                                      |
| Center contact resistance               | ≤ 3.0 mΩ                                    |
| Outer contact resistance                | ≤ 2.0 mΩ                                    |
| Test voltage (at sea level)             | 1000 V rms                                  |
| Working voltage (at sea level)          | 480 V rms                                   |
| Power handling (at 20 °C, sea level)    | ≤ 200 W @ 2.2 GHz                           |
| Intermodulation (3 <sup>rd</sup> order) | ≥ 160 dBc (2 x 43 dBm)                      |

- Connector only, VSWR in application depends decisive on PCB layout

**Mechanical data**

|                            |            |
|----------------------------|------------|
| Mating cycles              | ≥ 1000     |
| Center contact captivation | ≥ 7 N      |
| Engagement force           | 10 N max.  |
| Disengagement force        | 2.2 N min. |

**Environmental data**

|                             |   |
|-----------------------------|---|
| Temperature range           | -65°C to +165°C                                 |
| Rapid change of temperature | IEC 60169-1, Sub-clause 16.4 (-65°C to +165°C)  |
| Vibration                   | IEC 60068-2-64 random                           |
| Shock                       | IEC 60068-2-27 (half-sine)                      |
| High temperature endurance  | IEC 60169-1, Sub-clause 18 (+165°C, 1000 hours) |
| Max. soldering temperature  | IEC 61760-1, +260°C for 10 sec.                 |
| RoHS                        | compliant                                       |

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

Weight 1,85 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          |
|--|----------|----------------|----------|--|---------------------------|------------|---------------|
| Huppenberger   | 13/05/14 | B_Huppenberger | 15.09.14 | a00  | 14-s318                   | C_Vitzthum | 15.09.14      |
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