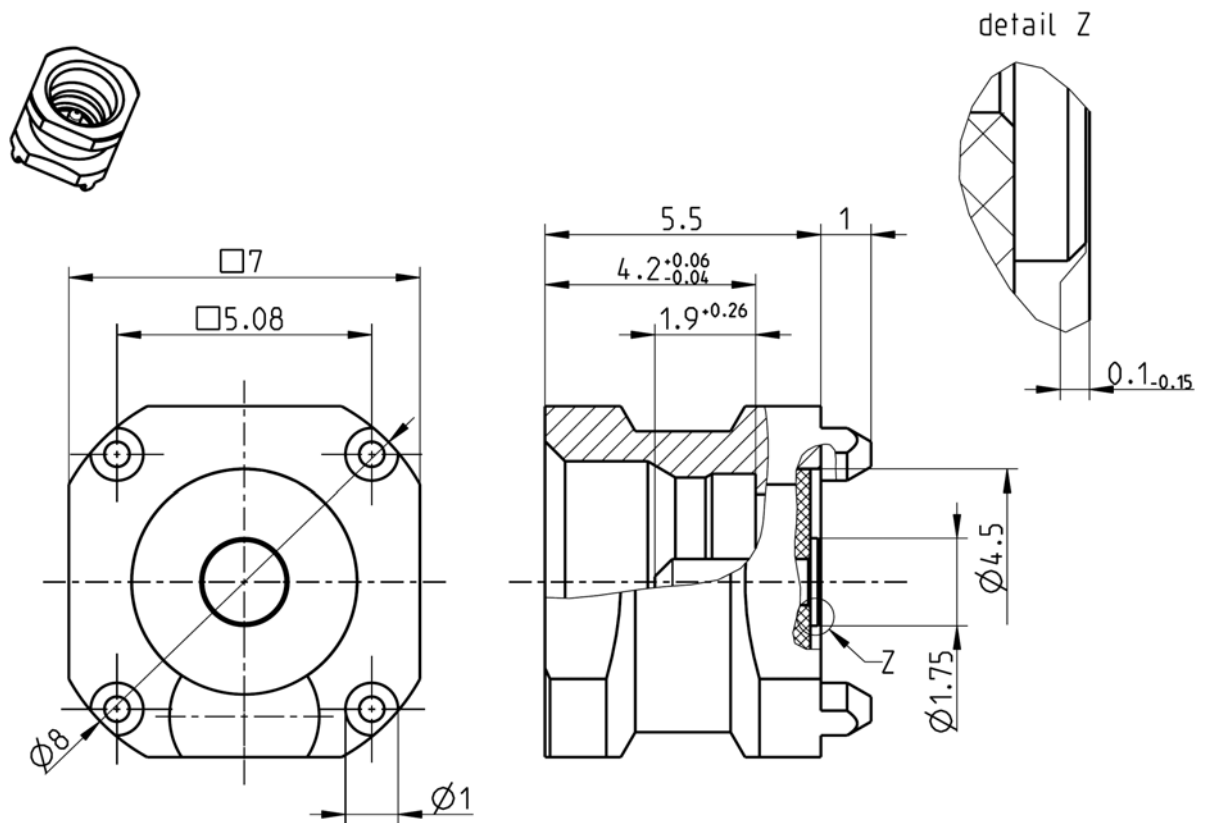




All dimensions are in mm; tolerances acc. to ISO 2768 m-H

#### Interface

According to

Rosenberger P-SMP

#### Documents

Panel piercing

B 126b

#### Material and plating

##### Connector parts

Center contact  
Outer contact  
Dielectric

##### Material

Brass  
Brass  
PEEK/LCP

##### Plating

AuroDur®, gold plated  
AuroDur®, gold plated

## TECHNICAL DATA SHEET

**Rosenberger****P-SMP STRAIGHT PLUG FOR PCB  
LIMITED DETENT****119S102-40ML5****Electrical data**

|                                         |                                                       |
|-----------------------------------------|-------------------------------------------------------|
| Impedance                               | 50 $\Omega$                                           |
| Frequency                               | DC to 10 GHz                                          |
| Return loss                             | $\geq 30$ dB, DC to 4 GHz<br>$\geq 25$ dB, 4 to 6 GHz |
| Insertion loss                          | $\leq 0.03 \times \sqrt{f(\text{GHz})}$ dB            |
| Insulation resistance                   | $\geq 5$ G $\Omega$                                   |
| Center contact resistance               | $\leq 3.0$ m $\Omega$                                 |
| Outer contact resistance                | $\leq 2.0$ m $\Omega$                                 |
| Test voltage (at sea level)             | 1000 V rms                                            |
| Working voltage (at sea level)          | 480 V rms                                             |
| Power handling (at 20 °C, sea level)    | $\leq 200$ W @ 2.2 GHz                                |
| Intermodulation (3 <sup>rd</sup> order) | $\geq 160$ dBc (2 x 43 dBm)                           |

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

|                            |            |
|----------------------------|------------|
| Mating cycles              | $\geq 100$ |
| Center contact captivation | $\geq 7$ N |
| Engagement force           | 45 N max.  |
| Disengagement force        | 15 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.                 |
| 2002/95/EC (RoHS)           | compliant                                       |

**Tooling**

N/A

**Suitable cables**

N/A

**Weight**

|        |          |
|--------|----------|
| Weight | 1.1 g/pc |
|--------|----------|

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          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|----------|--------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|---------------|
| Gramsamer J.                                                                                                                                           | 25/11/09 | Sa. Krautenbacher | 11.03.14 | d00                                                                                                                | 14-0352                   | T. Krojer | 11.03.14      |
| Rosenberger Hochfrequenztechnik GmbH & Co. KG<br>P.O.Box 1260 D-84526 Tittmoning Germany<br><a href="http://www.rosenberger.de">www.rosenberger.de</a> |          |                   |          | Tel.: +49 8684 18-0<br>Fax: +49 8684 18-499<br>email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> |                           |           | Page<br>2 / 2 |