



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

**Interface**

According to

MIL-STD-348

**Documents**

PCB layout

please request optimized footprint for your application

**Material and Plating**

**Connector parts**

- Center contact
- Outer contact
- Dielectric

**Material**

- CuBe
- Brass
- Casting resin

**Plating**

- AuroDur®, gold plated
- AuroDur®, gold plated

# Technical Data Sheet

# Rosenberger

SMP

Straight Plug PCB  
Limited Detent

19S107-400L5

## Electrical Data

Impedance	50 Ω
Frequency	DC to 40 GHz
Return loss	≥ 26 dB, DC to 12 GHz ≥ 17 dB, 12 to 40 GHz
Insertion loss	≤ 0.05 x $\sqrt{f}$ [GHz] dB
Insulation resistance	≥ 5 GΩ
Center contact resistance	≤ 6 mΩ
Outer contact resistance	≤ 2 mΩ
Test voltage (at sea level)	500 V rms
Working voltage (at sea level)	335 V rms
Contact Current	≤ 1.2A DC

- Connector only, Return loss in application depends decisive on PCB layout -

## Mechanical Data

Mating cycles	≥ 500
Center contact captivation	≥ 7 N
Engagement force	
- Limited detent	≤ 45 N
Disengagement force	
- Limited detent	≥ 9 N

## Environmental Data

Temperature range	-65 °C to +155 °C
Rapid change of temperature	IEC 60068-2-14 (-65 °C to 155 °C, 1h dwell, 50 cycles)
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition A
Damp heat	IEC 60068-2-78 (40°C, 93% RH, 56d)
High temperature endurance	IEC 61169-1, Sub-clause 9.6 (+155 °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 0.5 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.

For the installation of the electrotechnical equipment, particular electrotechnical expertise is required.



Draft	Date	Approved	Date
A. Gasteiger	24.06.15	Chr. Janßen	27.10.20

Rev.	Engineering change number	Name	Date
b00	20-1927	S. Huber-Siegl	27.10.20

Rosenberger Hochfrequenztechnik GmbH & Co. KG  
P.O.Box 1260 D-84526 Tittmoning Germany  
[www.rosenberger.de](http://www.rosenberger.de)

Tel. : +49 8684 18-0  
Email : [info@rosenberger.de](mailto:info@rosenberger.de)

Page  
2 / 2