

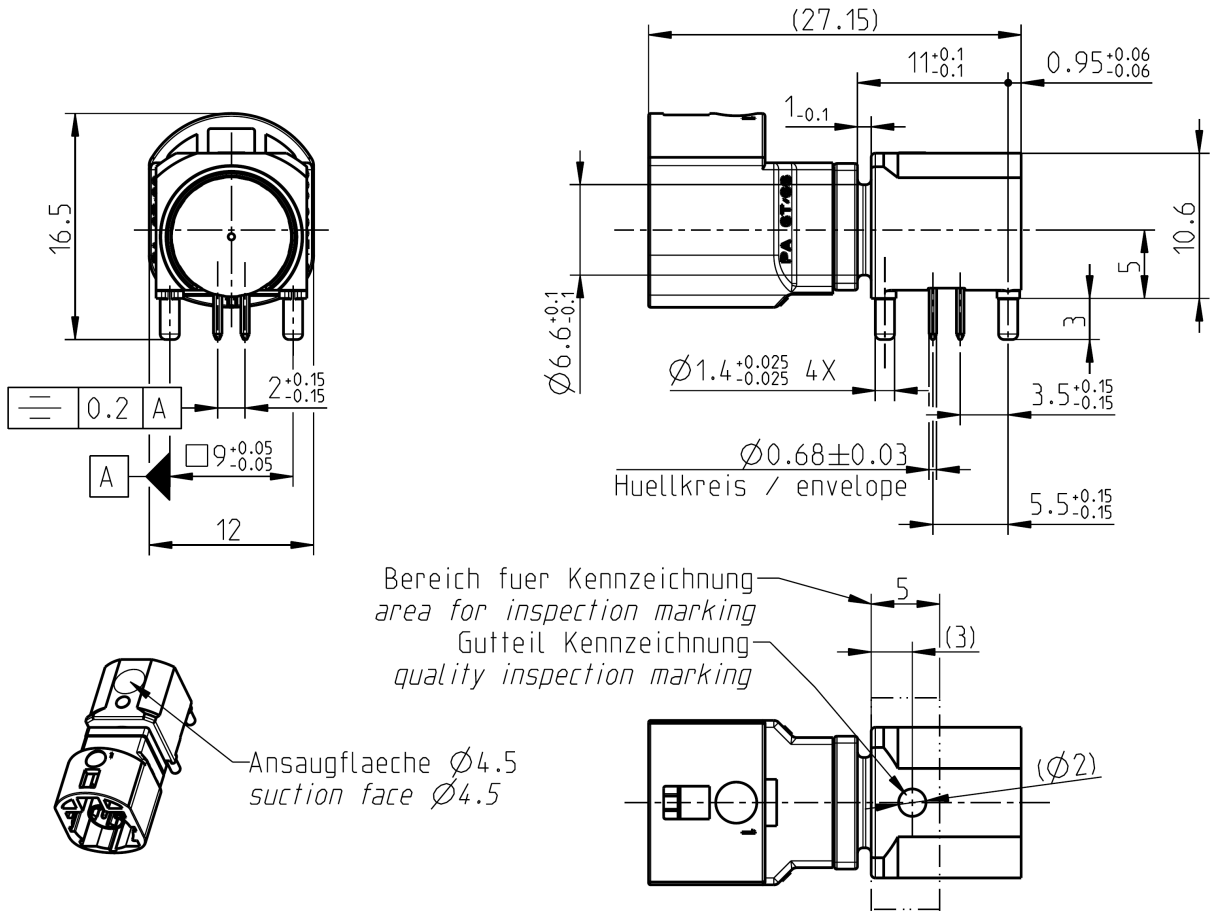
# Technical Data Sheet

# Rosenberger

Rosenberger  
HSD®

RIGHT ANGLE PLUG  
FOR PCB

## D4S20G-400A5-Y



All dimensions are in mm; tolerances according to ISO 2768 m-H  
EMC-screening must be assured by chassis compartment. Control box manufacturer is responsible for EMC-screening.

### Interface

According to

RN 059-01

### Documents

Assembly instruction  
Panel piercing  
Pinning instruction  
Test specification

D4V013  
MB\_261  
RN 053-01  
RN 061-01

### Material and plating

#### Connector parts

Center contact

#### Material

Spring bronze

#### Plating

Gold, 0.15 μm (Interface)

Outer contact 1 (Interface)

Brass

Tin, 0.5-2 μm (PCB)

Outer contact 2 (PCB)

Zinc Alloy

Nickel, 3-6 μm

Cover

Alpaca

Tin, 2-5 μm over Nickel 1-5μm

Dielectric

LCP

Housing

PA 6T/66

©

**Electrical data**

|  |  |
|--|--|
| Impedance, differential mode           | 100 Ω differential signalling, for one pair or quad cable shielded         |
| Frequency                              | DC to 2.0 GHz  |
| Return loss                            | ≥ 20 dB to 1 GHz<br>≥ 17 dB to 2 GHz                                       |
| Insertion loss                         | ≤ 0.1 dB @ 1.0 GHz   |
| Skew (between signal contacts)         | ≤ 5 psec.  |
| Nearend-Crosstalk                      | ≤ 30 dB  |
| Farend-Crosstalk                       | ≤ 35 dB  |
| Insulation resistance                  | ≥ 1x10 <sup>3</sup> MΩ   |
| Signal contact resistance              | ≤ 10 mΩ  |
| Outer contact resistance               | ≤ 7.5 mΩ   |
| Test voltage                           | 250 V rms  |
| Working voltage                        | 100 V rms  |
| Power current                          | ≤ 1.5 A DC   |
| RF-leakage ( shielding effectiveness ) | ≥ 75 dB up to 1 GHz (IEC 62153-4-7)<br>≥ 65 dB up to 2 GHz (IEC 62153-4-7) |

**Mechanical data**

|                       |         |
|-----------------------|---------|
| Mating cycles         | ≥ 25    |
| Engagement force      | ≤ 30 N  |
| Disengagement force   | ≥ 5 N   |
| Retention force latch | ≥ 110 N |
| Coding efficiency     | ≥ 80 N  |

**Environmental data**

|                          |   |
|--------------------------|---|
| Temperature range        | -40°C to +105°C   |
| Thermal shock            | DIN IEC 60068-2-14 Test NA  |
| Temperature and humidity | USCar 2 – 4 5.6.2   |
| Vibration (Random)       | DIN IEC 60068-2-64  |
| Mechanical shock         | DIN IEC 60068-2-27  |
| High-Temp. Exposure      | DIN IEC 60068-2-2   |
| Soldering profile        | acc. to IEC 60068-2-58; Group 3&4   |
| RoHS                     | compliant <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">c</span> |

**Tooling**

N/A

**Suitable cables**

N/A

**Packing**

|          |  |
|----------|--|
| Standard | 175 pcs on tape & reel<br>1050 pcs in box (6 x 175 pcs/reel) <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">d</span> <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">e</span> |
| Weight   | 8,6 g/pce  |

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