

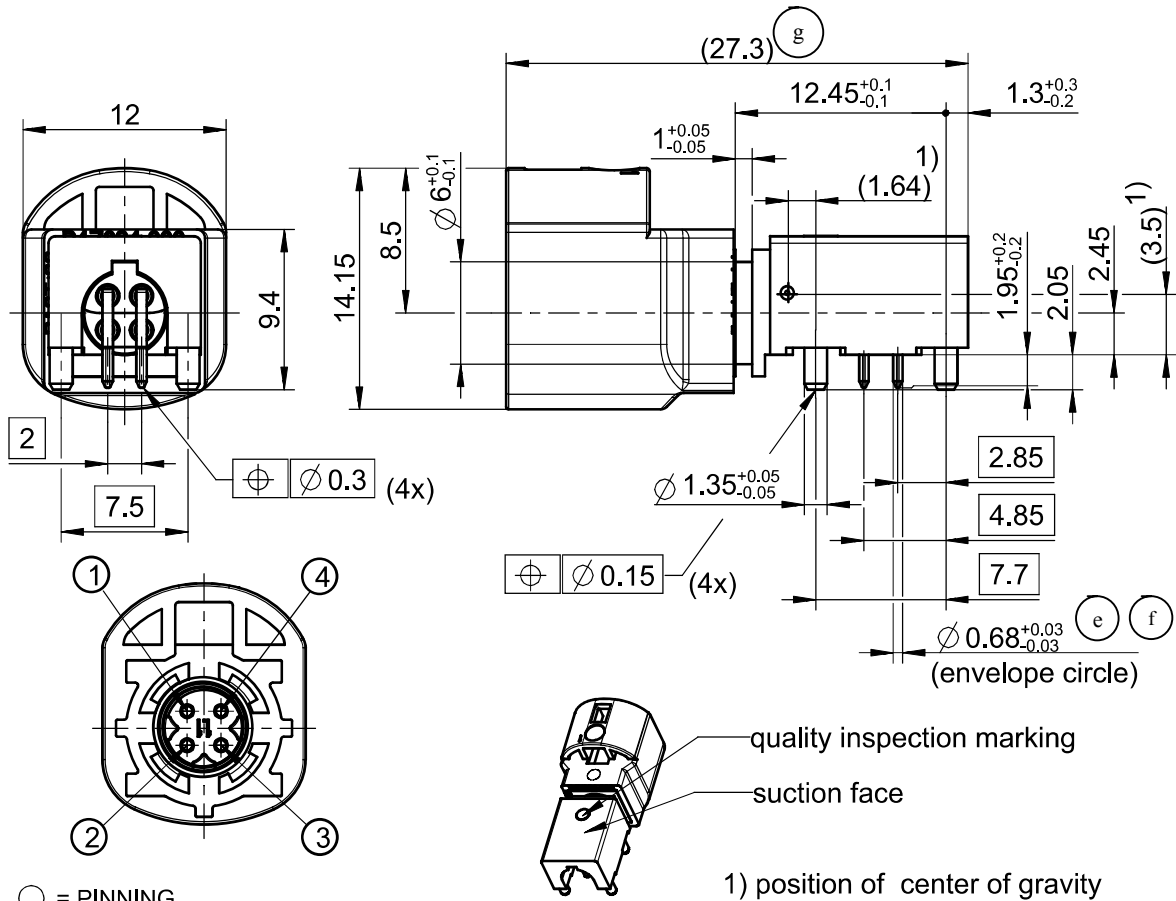
# Technical Data Sheet

# Rosenberger

Rosenberger  
HSD®

RIGHT ANGLE PLUG  
FOR PCB

## D4S20L-40MA5-Y



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

### Interface

According to RN 059-01

### Documents

Pinning instruction RN 053-01 (e)  
Panel piercing MB\_215  
Test specification RN 061-01

### Material and plating

#### Connector parts

Center contact

#### Material

Spring bronze

#### Plating

Gold, 0.15 µm (Interface)

Outer contact

Brass

Tin, 0.5-2 µm (PCB)

Ni 3-6 µm (Interface)

Dielectric

LCP

Tin 3-6 µm (PCB)

Housing

HTN (e)

**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 1.0 GHz<br>≥ 17 dB to 2.0 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                         |

**Tooling**

N/A

**Suitable cables**

N/A

**Packing**

|          |                        |
|----------|------------------------|
| Standard | 200 pcs in tape & reel |
| Weight   | 6.84 g/pce             |

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RF\_35/05.10/6.2

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### Coding

Part Number has to be accomplished by codification

| Coding | Plug  | Colour    | RAL       | Part-Number    |
|--------|---|-----------|-----------|----------------|
| A      |  | black     | sim. 9005 | D4S20L-40MA5-A |
| B      |  | white     | sim. 9001 | D4S20L-40MA5-B |
| C      |  | blue      | sim. 5005 | D4S20L-40MA5-C |
| D      |  | bordeaux  | sim. 4004 | D4S20L-40MA5-D |
| E      |  | green     | sim. 6002 | D4S20L-40MA5-E |
| F      |  | brown     | sim. 8011 | D4S20L-40MA5-F |
| Z      |  | waterblue | sim. 5021 | D4S20L-40MA5-Z |

### Change History

| Rev. | Date     | Change  |
|------|----------|---|
| e00  | 28.01.14 | Documents removed<br>-Assembly instruction D4V010<br>Material and plating changed<br>-Material PA 6T/66 to HTN<br>Right Angle Plug removed<br>-measurement $\square 0,55$ |
| f00  | 07.04.14 | Dimension change from $\square 0,55/\varnothing 0,63 \pm 0,03$ to $\varnothing 0,68 \pm 0,03$   |
| g00  | 04.04.17 | Ovrrall length changed from 27,6 to 27,3  |

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     |
|------------|----------|-----------|----------|------|---------------------------|---------|----------|
| T. Höfling | 23.03.11 | C. Wagner | 04.04.17 | g00  | 17-0557                   | C. Paus | 04.04.17 |

|  |  |               |
|--|--|---------------|
| 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>Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a> | Page<br>3 / 3 |
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