

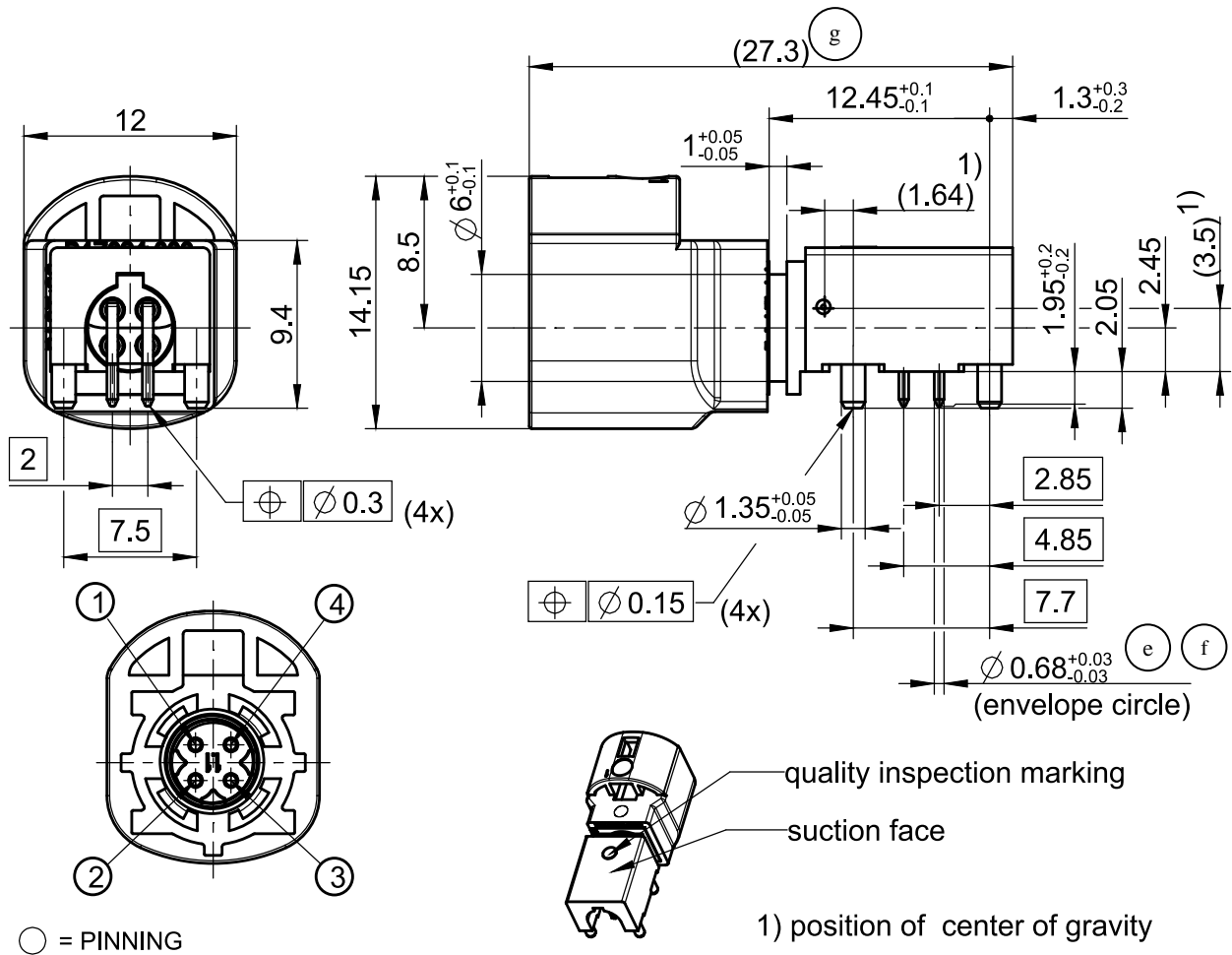
# Technical Data Sheet

# 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  
Panel piercing  
Test specification

RN 053-01  
MB\_215  
RN 061-01

### Material and plating

#### Connector parts

Center contact

#### Material

Spring bronze

#### Plating

Gold, 0.15  $\mu$ m (Interface)  
Tin, 0.5-2  $\mu$ m (PCB)  
Ni 3-6  $\mu$ m (Interface)  
Tin 3-6  $\mu$ m (PCB)

Outer contact

Brass

Dielectric  
Housing

LCP  
HTN

**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 ≥ 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) ≥ 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 -Assembly instruction D4V010 Material and plating changed -Material PA 6T/66 to HTN Right Angle Plug removed -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

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