

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

Outer contact Brass

Dielectric LCP

Housing HTN (e)

**Plating**

Gold, 0.15 µm (Interface)  
 Tin, 0.5-2 µm (PCB)  
 Ni 3-6 µm (Interface)  
 Tin 3-6 µm (PCB) (d)

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RF\_35/05\_10/6.0

**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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# Technical Data Sheet

# Rosenberger








RosenbergerHSD®

RIGHT ANGLE  
PLUG  
FOR PCB

## D4S20L-40MA5-Y

### 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
d00	03.09.13	Material and plating changed -from Tin 3-6 µm to Tin 3-6 µm (PCB) -from over Ni 3-6 µm to Ni 3-6 µm (Interface)
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 $\varnothing 0,68\pm 0,03$

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	T. Höfling	07.04.14	f00	14-0526	R. Hochheim	07.04.14

Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>	Tel. : +49 8684 18-0 Fax : +49 8684 18-499 Email : <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>	Page 3 / 3
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