

All dimensions are in mm;  
EMC-screening must be assured by chassis compartment. Control box manufacturer is responsible for EMC-screening.

### Interface

According to

RN\_059-01

### Documents

PCB layout

MB\_640

Pinning instruction

RN\_053-01

Test specification

RN\_061-01

Tape and Reel packaging

tbd

**Preliminary**

**Material and plating**

**Connector parts**

Center contact

**Material**

Spring bronze

**Plating**

Gold, 0.15 µm min. (Interface)

Tin, 0.5 µm min. (PCB)

Outer contact (Interface)

Brass

Nickel, 3 µm min.

Outer contact (PCB)

Zinc alloy

Tin, 2 µm min. over Nickel

Dielectric

LCP

Housing

HTN

Spring washer

Spring bronze

Nickel, 2.5 µm min.

**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)

≤ 25 psec. (Can be reduced by layout)

Nearend-Crosstalk

≤ -30 dB (DC to 1 GHz)

Farend-Crosstalk

≤ -35 dB (DC to 1 GHz)

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

IEC 60068-2-14 Test NA

Temperature and humidity

USCar 2.4 - 5.6.2

Vibration (Random)

IEC 60068-2-64

Mechanical Shock

IEC 60068-2-27

High-Temp. Exposure

IEC 60068-2-2

Soldering profile

acc. to IEC 60068-2-58; Group 3 (250°C/30s)

RoHS

compliant

**Packing**

Standard

tbd







Weight

8.2 g/pce

**Preliminary**

**Coding**

Part Number has to be accomplished by codification

Coding	Plug	Colour	RAL	Part-Number
G		grey	sim. 7031	D4S2UY-400A5-G
H		violet	sim. 4003	D4S2UY-400A5-H
J		beige	sim. 1001	D4S2UY-400A5-J
K		curry	sim. 1027	D4S2UY-400A5-K
L		yellow green	sim. 6018	D4S2UY-400A5-L
M		pastel orange	sim. 2003	D4S2UY-400A5-M
O		light green	sim. 6027	D4S2UY-400A5-O

**Preliminary**

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
M. Bieberbach	23.02.17	S. Mysyk	23.02.17	100	17-v018	M. Bieberbach	23.02.17