



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

RF-Connector

RN_066-01

Documents

PCB layout

MB_324

Pinning instruction

RN_053-01

Tape & reel packaging

VG156.25000

Material and plating

Connector parts

Center contact
Outer contact 1 (Interface)
Outer contact 2 (PCB)
Dielectric
Plastic housing
Power pins
Screening

Material

Spring bronze
Brass
Zinc Alloy
LCP
HTN
Spring bronze
Stainless steel

Plating

Gold, 0.15 µm (Interface), Tin, 0.5-2 µm (PCB)
Nickel, 3-6 µm
Tin, 2-6 µm, over nickel
Tin, 2-6 µm, over nickel
Tin, 2-5 µm (pre tinned)

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RF_35/05:10/6.0

Electrical data

| | |
|--|--|
| Impedance, even mode | ≈ 32 Ω common mode only |
| 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) | ≤ 20 psec. (can be reduced by layout) |
| Nearend-Crosstalk | ≤ 30 dB |
| Farend-Crosstalk | ≤ 35 dB |
| Insulation resistance | ≥ 1x10 ³ MΩ |
| Signal contact resistance | ≤ 10 mΩ |
| Outer contact resistance | ≤ 7.5 mΩ |
| Test voltage | 500 V rms |
| Working voltage | 100 V rms |
| Test current capability at 80°C | ≤ 1.5 A DC |
| Test current capability at 80°C Lin-contacts | ≤ 2.0 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) |

- Connector only, VSWR in application depends decisive on PCB layout

Mechanical data

| | |
|-----------------------|---------|
| Mating cycles | ≥ 25 |
| Engagement force | ≤ 60 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 (-40°C/+105°C) |
| Temperature humidity cycling | USCar 2 – 4 – 5.6.2 (test temperature +105°C) |
| Vibration | DIN IEC 60068-2-64 (class 2) |
| Mechanical shock | DIN IEC 60068-2-27 |
| Dry Heat | DIN IEC 60068-2-2 (temperature +105°C) |
| Max. soldering temperature | +260°C for 10 sec. |
| RoHS | compliant |

Tooling

N/A

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Technical Data Sheet

Rosenberger

HSD

RIGHT ANGLE PLUG PCB

99S2UI-40MA5-Y

Packing

Standard
Weight

250 pcs in tape and reel
9.23 g/pce

Coding

Part number has to be accomplished by codification

| Coding | Plug | Color | RAL | Part-Number |
|--------|---|-------------|-----------|----------------|
| G |  | grey | sim. 7031 | 99S2UI-40MA5-G |
| H |  | violet | sim. 4003 | 99S2UI-40MA5-H |
| O |  | light green | sim. 6027 | 99S2UI-40MA5-O |

Change History

| Rev. | Date | Change |
|------|----------|-----------------------------------|
| e00 | 30.04.14 | Dimension "1" written in brackets |
| | | |

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 | 25.01.10 | S. Reinthaler | 29.04.14 | e00 | 14-0633 | T. Pscheiden | 29.04.14 |
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