

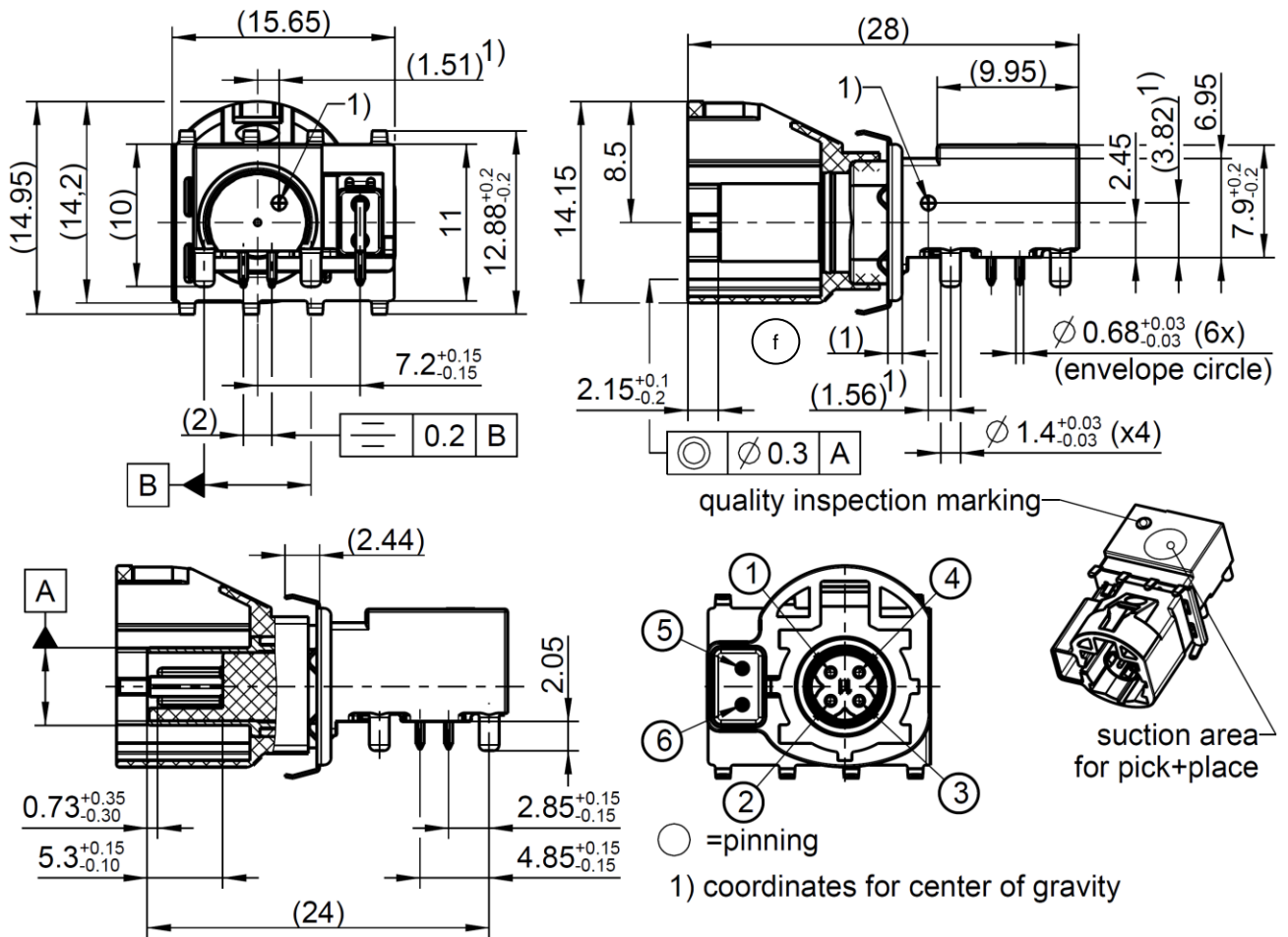
Technical Data Sheet

Rosenberger

Rosenberger
HSD®+2

RIGHT ANGLE PLUG PCB

99S20I-40MA5-Y



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_310

Pinning instruction

RN_053-01

Tape & reel packaging

VG146.25000

Material and plating

Connector parts

Center contact

Material

Spring bronze

Plating

Gold, 0.15 μ m (Interface), Tin, 0.5-2 μ m (PCB)

Outer contact 1 (Interface)

Brass

Nickel, 3-6 μ m

Outer contact 2 (PCB)

Zinc Alloy

Tin, 2-6 μ m, over nickel

Dielectric

LCP

Plastic housing

HTN

Power pins

Spring bronze

Tin, 2-6 μ m, over nickel

Screening

Stainless steel

Tin, 2-5 μ m (pre tinned)

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 MQS pins | ≤ 2.0 A DC (dependent on mating connector and cable) |
| 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

Packing

| | |
|----------|--------------------------|
| Standard | 250 pcs in tape and reel |
| Weight | 9.24 g/pce |

Dieses Dokument ist urheberrechtlich geschützt • This document is protected by copyright • Rosenberger Hochfrequenztechnik GmbH & Co. KG

RF_35/09.14/6.2