



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 VG147.25000

Material and plating

Connector parts

Connector parts	Material	Plating
Center contact	Spring bronze	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

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

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 MQS pins	≤ 5.0 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)

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&reel; 185 pcs. in tape&reel
Weight	8.15 g/pce



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

RF_35/05.10/6.0