



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 $\mu$ m (Interface), Tin, 0.5-2 $\mu$ m (PCB)
Outer contact 1 (Interface)	Brass	Nickel, 3-6 $\mu$ m
Outer contact 2 (PCB)	Zinc Alloy	Tin, 2-6 $\mu$ m, over nickel
Dielectric	LCP	
Plastic housing	HTN	
Power pins	Spring bronze	Tin, 2-6 $\mu$ m, over nickel

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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 <b>shielded</b>
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 <sup>3</sup> 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



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