RosenbergerHSD® Technical Data

Technical Data RosenbergerHSD® (Code D4)

Applicable standards

Interface according to	RosenbergerHSD® RN_059-01 RosenbergerHSD®waterproof RN_063_01 RosenbergerHSD®double 8 mm: RN_059-02 RosenbergerHSD®double 12.7 mm: RN_059-03 RosenbergerHSD®+2: RN_066-01 RosenbergerHSD®+4: RN_066-03 RosenbergerHSD®+8: RN_066-02
Quality tested according to	Rosenberger Norm RN 061-01

Electrical data

Impedance	100 Ω
Frequency range depending on cable type	DC to 6 GHz
Return loss	≥ 20 dB, DC to 1 GHz ≥ 17 dB, 1 GHz to 2 GHz
Insertion loss	≤ 0.1 dB, DC to 2 GHz
Skrew (between signal contacts) Straight connectors Right angle connectors	 ≤ 5 ps ≤ 25 ps
Near end crosstalk	≤ - 30 dB, DC to 1 GHz
Far end crosstalk	≤ - 35 dB, DC to 1 GHz
Insulation resistance	≥ 1 x 10^3 MΩ
Signal contact resistance	≤ 10 mΩ
Outer contact resistance	≤ 7.5 mΩ
Test voltage	250 V rms
Working voltage	100 V rms
Contact current depending on cable type	≤ 3 A DC @ 85 °C ambient temperature
Differential shielding effectiveness	≥ 75 dB, DC to 1 GHz ≥ 65 dB, 1 GHz to 2 GHz

Mechanical data

Mating cycles	≥ 25
Engagement force	≤ 30 N
Engagement force waterproof	≤ 40 N
Disengagement force	≥ 5 N
Retention force latch	≥ 110 N
Retention force primary lock	≥ 80 N
Retention force secondary lock	≥ 60 N
Polarization feature effectiveness	≥ 80 N

Environmental data

Temperature range	-40 °C to +105 °C
Thermal shock	IEC 60068-2-14
Vibration	IEC 60068-2-64
Mechanical shock	IEC 60068-2-27
Temperature and humidity	USCAR 2-4 5.6.2
Dry heat	IEC 60068-2-2
Max. soldering temperature	IEC 60068-2-58, group 3 & 4

Materials

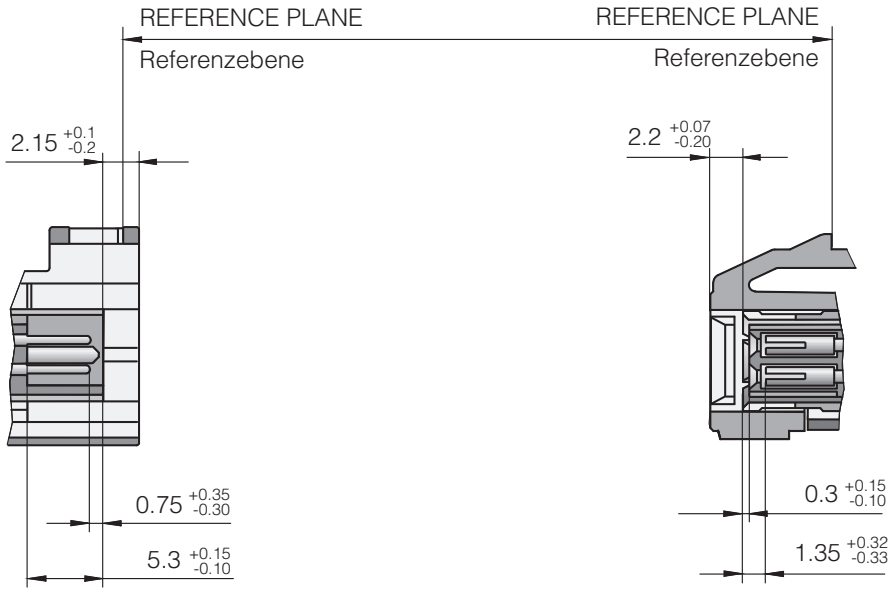
Outer contact	CuZn, CuSn (Brass, Bronze), or equivalent
Signal contacts	CuZn, CuSn (Brass, Bronze), or equivalent
Dielectric	PA, LCP, or equivalent
Gasket	Silicone, Rubber, or equivalent
Crimping ferrule	CuSn (Bronze), or equivalent
Plastic housings and secondary lock	PA, PBT, or equivalent

Platings

Outer contact	AuroDur®, Nickel, Tin
Signal contacts	AuroDur®

Rosenberger connectors fulfill in principle the indicated data of the Technical Data. Individual values of connectors may deviate depending upon application, design, type of cable, assembly method and execution. Specific data sheets for particular products can be provided on request from your Rosenberger sales partner.

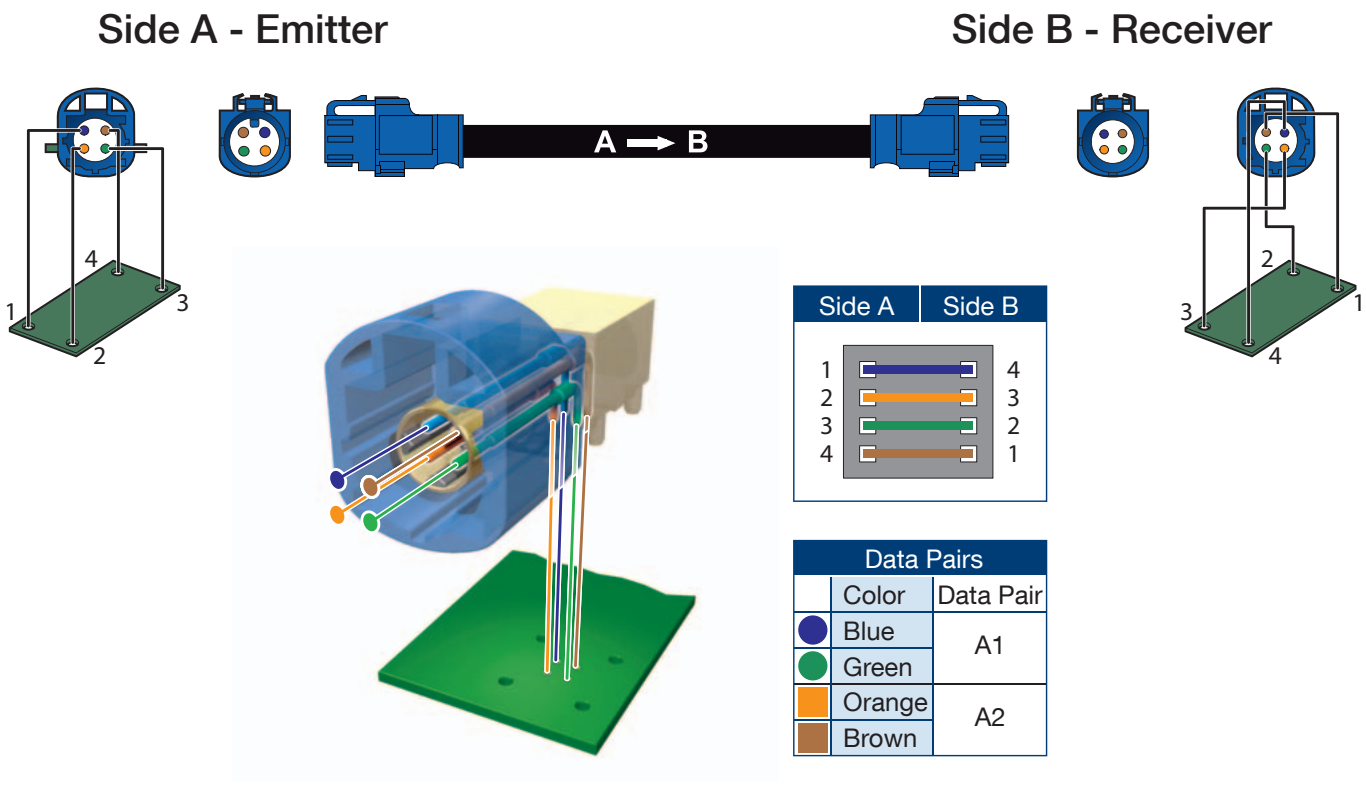
Interface Dimensions



MALE
Stecker

FEMALE
Kuppler

Pinning



Pinning according Rosenberger norm RN-053-01