



RoHS
Ready 

Introducing TE Connectivity High Speed Data (HSD) Connector Portfolio

TE Connectivity's (TE's) High Speed Data (HSD) connector portfolio is designed for high speed data transmission to meet automotive requirements.

TE's HSD is a very robust and fully shielded system. The HSD contacts can be utilized within a broad range of existing interfaces, including unsealed or sealed versions as well as different hybrid and dual variants.

The system is validated with different types of cable and supports future data rate requirements related to next generations of Serializer/Deserializer technologies.



Introduction

KEY FEATURES

- Special design for high speed data transmission within automotive environment
- TE's HSD supports next generations of SerDes Technology
- Excellent EMI performance
- TE's HSD contacts reuseable in various interface versions
- TE's HSD compatible to AK group (german OEM working group) interface specification
- Different cable types validated
- Lightweight device headers
- Headers are reflow soldering capable

VALUE TO CUSTOMER

- TE as system supplier (components & cable assembly processes from one source)
- High level of process automation
- Extensive connector portfolio

CONNECTOR INTERFACES

- HSD 180° male connector
- HSD 180° female connector
- HSD 180° male sealed connector
- HSD 180° female sealed connector
- HSD 180° + 2 MQS hybrid connector
- HSD 180° + 2 MQS male hybrid connector
- HSD 180° Dual 12.7mm connector
- HSD 180° Dual 8.00mm connector
- HSD 90° connector with cable outlets up/down/left/right
- HSD 90° sealed connector (planned)
- HSD 90° + 2 MQS hybrid connector
- HSD 180° + 4 MQS hybrid connector
- HSD 90° Dual 12.7mm connector

APPLICATIONS

- Camera Connection
- Combi Instrument Connection
- Digital Tuner Video/Audio
- Display Connection
- Rear Seat Entertainment
- USB Interface Connection
- Telematics Connection

MECHANICAL

- Wire Cross Section: 0,14 – 0,22mm²
- Mating Cycles: min. 25
- Coding Efficiencyn: min. 80 N
- Retention Force Connector Lock: min. 110 N

ELECTRICAL

- Return Loss: ≤ -20 dB to 1 GHz
≤ -17 dB to 2 GHz
- Insertion Loss: ≤ 0,1 dB to 1 GHz
- Contact Current: ≤ 2,5 A DC
- Differential Shielding Effectiveness (Coupler): ≥ 75 dB up to 1 GHz
≥ 65 dB up to 2 GHz

Skew (between Signal Contacts):

- 180° Connectors: ≤ 5 ps/m
- 90° Connectors: ≤ 25 ps/m

MATERIALS

- Shield Contact: CuZn/CuSn
- Signal Contact: CuSn
- Contact Carrier: LCP/PBT
- Crimp Ferrule: CuSn
- Coding Cap: PPA/PBT
- Gasket: Silicone

STANDARDS AND SPECIFICATIONS

- TE Product Specifications:
 - 108-94331 (HSD Headers)
 - 108-94333 (HSD 90° Connector)
 - 108-94334 (HSD180° Connector)
 - 108-94434 (HSD Hybrid Connector)
 - 108-94433 (HSD Dual Connector)
 - 108-94106 (HSD RF System)
- TE Application Specifications
 - 114-94058 (HSD 180° Connector)
 - 114-94117 (HSD 90° Connector)
 - 114-18867 (HSD Header)
- IDB 1394 Automotive Specification
- USCAR 2, REV 5
- LV214
- RoHS compliant

PRODUCT OFFERING (part numbers if available)

Part number	Part Name	Mating Part Number
x-1823071-x	HSD 90° header	See cable assemblies
x-1823271-x	HSD 180° header	See cable assemblies
x-2112507-x	HSD 90° header with shielding device	See cable assemblies
x-2141723-x	180° female – 180° female cable assembly	See headers
x-2141724-x	180° female – 180° male cable assembly	See headers
x-2177130-x	180° female – 90° female cable assembly	See headers
x-2177131-x	90° female – 90° female cable assembly	See headers
x-2177132-x	90° female – 180° male cable assembly	See headers
x-2177257-x	90° female – 180° female cable assembly	See headers
x-2112030-x	180° female – 180° female sealed cable assembly	See headers

Other cable configurations available on request.

For further information please visit www.te.com/automotive -> Infotainment Solutions

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1654315-2 | Revised 4-2014 | IM · EB

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