

## HSD Connector System

### COMPLIANT WITH USCAR-2 SPECIFICATIONS

HSD connector system is a fully shielded interconnect system that can be used with shielded twisted quad cables. It has a high-performance digital system for low-voltage differential signals which prevents interference from crosstalk and external sources. It has the minimum size to satisfy global automotive requirements such as LVDS camera, USB, and IEEE 1394 applications.

- Enhanced 2.5x retention force
- Compatible with other competing products
- Resistance to reflow soldering temperature
- Patent protected simple assembly design
- Quality tested according to USCAR-2

#### FEATURES

- Color coding effectiveness compliant to automotive requirements
- High retention force between the die-casting and plastic housing
- Cable side is designed for crimp connection
- Resistance to reflow soldering temperature
- Plug/wafer protected by scoop proof design
- Primary and secondary lock design
- Contact has insertion funnel protection
- USCAR-2 compliant design



#### BENEFITS

- Effective coding for better user experience in installation
- Prevent the connector damage during incorrect release
- Suitable for automated assembly
- Supports Pin-In-Paste (PIP) processes
- Prevents pins from being bent or contacts from being electrically shorted during mating
- Furnishes high cable retention force
- Provides a self-aligning feature molded into housings
- Meets Automotive critical mass for connector solutions

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High Temperature Polymer, UL94V-0
- Dielectrics: High Temperature Polymer, UL94V-0
- Contacts: Copper Alloy
- Die Casting: Zinc Alloy
- Cover: Zinc Alloy
- Baffle: Stainless Steel

### MECHANICAL PERFORMANCE

- Insertion Force: 35N max.
- Extraction Force without Locking Latch: 5N min.
- Extraction Force: 110N min.
- Durability: 25 Cycles

### APPROVALS & CERTIFICATION

- USCAR-2 Compliant
- ISO/TS Production Compliant
- Assembly Design Patent
- RoHS
- REACH/SVHC
- Low Halogen

### PACKAGING

- Single, Tray or Tape and Reel available upon request

### ELECTRICAL PERFORMANCE

- Contact Resistance: 20 mΩ max. per pin
- Isolation Resistance: Exceed 100 mΩ at 500 VDC
- Dielectric Withstanding Voltage: AC 250Vrms per minute

### ENVIRONMENTAL

- Temperature/Humidity Cycling: -40°C to +105°C, 90-95RH% / 40 Cycles
- High Temperature Exposure: Static 105°C / 1008 Hours

### SPECIFICATION

- Amphenol Product Specification: HSD Series Spec

### TARGET MARKETS/APPLICATIONS



Adapter Charger Module  
Advanced Driver Assistance System  
In-Vehicle Infotainment System  
Surround View Camera System

## PART NUMBERS

Description	Type	Part Numbers
HSD Connector	HSD+0 (Low Profile) Right Angle, A Coding with North, Tape and Reel	HSDNARPPCB12A
HSD Connector	HSD+0 (Low Profile) Right Angle, A Coding with North, Tray	HSDNARPPCB12B
HSD Connector	HSD+0 Right Angle, A Coding with North, Tape and Reel	HSDNARPPCB13A
HSD Connector	HSD+0 (Enhanced Type) Right Angle, A Coding with North, Tray	HSDNARPPCB18B
HSD Connector	HSD+0 Right Angle, A Coding with North, Tray	HSDNARPPCB19B
HSD Connector	HSD+2 Right Angle, A Coding with North, Tray	HSDNARPPCB7B
HSD Connector	HSD+0 Vertical, A Coding with North, Tray	HSDNASPPCB14B
HSD Connector	HSD+2 Vertical, A Coding with North, Tray	HSDNASPPCB15B
HSD Connector	HSD+0 (Low Profile) Right Angle, B Coding with North, Tray	HSDNBRPPCB12B
HSD Connector	HSD+0 (Enhanced Type) Right Angle, B Coding with North, Tray	HSDNBRPPCB18B
HSD Connector	HSD+2 Right Angle, B Coding with North, Tape and Reel	HSDNBRPPCB7A
HSD Connector	HSD+0 (Low Profile) Right Angle, C Coding with North, Tape and Reel	HSDNCRPPCB12A
HSD Connector	HSD+0 (Enhanced Type) Right Angle, C Coding with North, Tape and Reel	HSDNCRPPCB18A
HSD Connector	HSD+0 Right Angle, C Coding with North, Tray	HSDNCRPPCB19B
HSD Connector	HSD+2 Right Angle, C Coding with North, Tray	HSDNCRPPCB7B
HSD Connector	HSD+8 Right Angle, C Coding with North, Tape and Reel	HSDNCRPPCB8A
HSD Connector	HSD+0 Vertical, C Coding with North, Tray	HSDNCSPPCB14B
HSD Connector	HSD+0 Right Angle, F Coding with North, Tray	HSDNFRPPCB19B
HSD Connector	HSD+0 (Low Profile) Right Angle, K Coding with North, Tray	HSDNKRPPCB12B
HSD Connector	HSD+0 (Low Profile) Right Angle, K Coding with South, Tray	HSDSKRPPCB12B
HSD Connector	HSD+0 (Low Profile) Right Angle, B Coding with West, Tray	HSDWBRPPCB12B
HSD Connector	HSD+0, Right Angle, B Coding with West, Tray	HSDWBRPPCB13B
HSD Connector	HSD+0 (Enhanced Type), Right Angle, B Coding with West, Tray	HSDWBRPPCB18B
HSD Cable Assembly	HSD+0, Straight/Straight, Coding A to B, 1000mm	HSDFSAFSB1000FY
HSD Cable Assembly	HSD+0, Straight/Straight, Coding B to B, 680mm	HSDFSBFSB0680HT
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 500mm	HSDFSZFSZ0500HW
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 1000mm	HSDFSZFSZ1000HW
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 2000mm	HSDFSZFSZ2000HW
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 3000mm	HSDFSZFSZ3000HW
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 5000mm	HSDFSZFSZ5000HW
HSD Cable Assembly	HSD+0, Straight/Straight, Coding Z to Z, 7000mm	HSDFSZFSZ7000HW