

# stAK50h™ Infotainment Connector System

molex®

Leveraging industry-approved terminal design, the stAK50h™ Infotainment Connector System incorporates unsealed hybrid connectors to deliver both signal and Ethernet connectivity through one low-footprint connector

## Features and Benefits

Standard USCAR color-coded housings  
Supports visual polarization.  
Expedites assembly of connector systems

Compliant to USCAR-2 and global automotive OEM standards  
Enables faster time-to-market

stAK50h™ Infotainment Header (top) and Receptacle Key 3 (bottom)

PCB-alignment posts for mating headers  
Ensure proper terminal alignment in via-holes of the PCB during assembly

0.50mm and 1.20mm terminals developed around NanoMQS and AK (Arbeitskreis) Specifications  
Supports a wide range of low-current signal (4.0A) and Ethernet applications

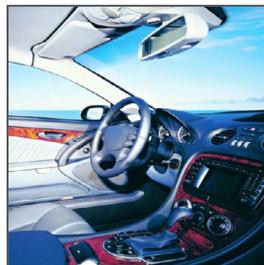
## Applications

### Automotive

- Comfort Systems
- Infotainment Systems
- Driver Assistance
- Body Electronics
- Safety/Chassis
- In-Vehicle Networking

### Commercial Vehicle

- Interior Electronic Modules
- Body Electronic Modules



Interior Lighting, Instrument Panels and Door Zone Modules



Power Seating



Navigation Systems

# stAK50h™ Infotainment Connector System



## Specifications

### REFERENCE INFORMATION

Packaging: Tray  
 UL File No.: UL-94 HB Flame Rating  
 Mates With: 160013 Header mates with 160014 Receptacle  
 Designed In: Millimeters  
 Keying Options: 4  
 Color:  
 Header: Grey  
 Receptacle: Dark Grey, Light Green, Light Grey and Black

### ELECTRICAL

Voltage (max.): 500V DC  
 Current (max.):  
 0.50mm: 4.0A  
 1.20mm: 12.0A  
 Contact Resistance (max.):  
 0.50mm: 25mΩ  
 1.20mm: 13mΩ  
 Isolation Resistance (min.): 100MΩ

### MECHANICAL

Mating Force (max.): 75N  
 Polarization Effectiveness (min.): 185N  
 Terminal Retention (min.):  
 0.50mm: 15N  
 1.20mm: 50N  
 Durability: 10 cycles

### PHYSICAL

Housing: 30% Glass-Filled SPS  
 Cable Jacket: TPU  
 Metal: C26000 Brass  
 Contact Plating:  
 0.50mm: Tin (Sn) over Nickel (Ni)  
 1.20mm: Tin (Sn – Matte for PCB) over Nickel (Ni)  
 Operating Temperature: -40 to +85°C  
 Vibration: GMW3191 (On-Body)

## Ordering Information

Order No.	Bay A Keying	Bay B Keying	PCB Tail Length	Packaging
160013-0023	2	3	2.10mm	Tube
160013-0041	4	1		
160013-1024	2	4	2.50mm	Tray
160013-2023	2	3	2.10mm	
160013-2041	4	1		
160013-3023	2	3	2.50mm	Tube
160013-3041	4	1		

Order No.	Bays	Keying	Housing Color
160014-0001	1	1	Dark Gray
160014-0002		2	Light Green
160014-0003		3	Light Gray
160014-0004		4	Black

[www.molex.com/link/stak50h.html](http://www.molex.com/link/stak50h.html)