



An extension to the proven, ruggedized high-speed HSAutoLink™ connection system, one-piece SMT headers ensure high integrity and robustness of the connector interface and offer an additional solution for manufacturing process optimization

The HSAutoLink™ Right-Angle SMT Header is a robust, industry-standard USCAR-30 header that is fully compatible with the current HSAutoLink™ cable assembly portfolio. The unique one-piece SMT design ensures high integrity of the connector interface and offers better optimization of available reverse-side PCB space in comparison with existing through-hole versions. Fully compatible with lead-free reflow processes and automated pick & place assembly this header offers an alternative soldering-process option for in the connected vehicle segment in automotive and commercial vehicles (vehicle-to-vehicle communications, infotainment and telematics).

Features and Benefits

Ruggedized, industry-standard USCAR-30 header supporting USB 2.0, Low Voltage Differential Signalling (LVDS), Ethernet

Meets all USB 2.0 electrical and electro-magnetic interference (EMI) shielding requirements
Meets low voltage differential signalling (LVDS) electrical and EMI shielding requirements

USCAR-30 compliant (operating temperature range: -40 to +85°C)

Provides qualified and market-tested USB electrical performance

Multiple header polarization keying options and colour coding

Provides assurance of proper mating with side-by-side parts

High-temperature plastic material; meets Jedec 260°C peak temperature

Compatible with lead-free, through-hole reflow process (pin-in-paste) or lead-free selective wave soldering process

One-piece solution

Ensures high integrity and robustness of the connector interface
Facilitates manufacturing process efficiency (one step soldering process)

Available in rigid tray or tape & reel

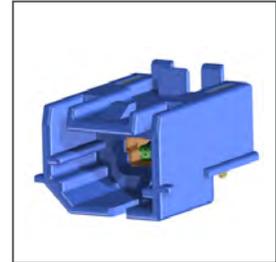
Flexible packaging options; fully compatible with automated pick & place assembly

Side ribs on housing

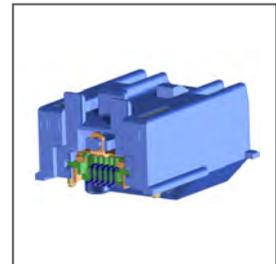
Provides PCB stabilization during reflow processing

PRELIMINARY HSAutoLink™ Right-Angle SMT Header

104223 USCAR USB Right Angle Header, SMT version



Mating Side



PCB Side

Applications

Automotive & Commercial Vehicles

- Infotainment
- Telematics devices
- Navigation systems
- Connected vehicle services
- Advanced Driver Assistance System (ADAS) - Unsealed application only

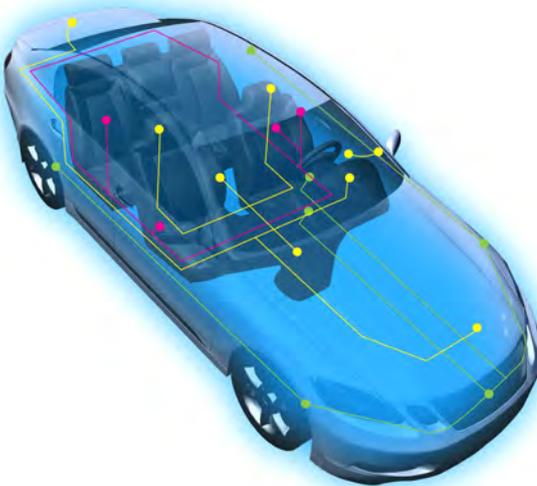


Commercial Vehicles

PRELIMINARY HSAutoLink™ Right-Angle SMT Header



Infotainment



Automotive



Navigation systems



Advanced Driver Assist Systems (ADAS)
in Automotive and Commercial Vehicles

Specifications

REFERENCE INFORMATION

Packaging: Tray, Tape & Reel
UL File No.: N/A
CSA File No.: N/A
Mates With: HSAutoLink™ cable assemblies series: 111005, 111014, 111015, 111019, 111020 and 111041
Designed In: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: N/A

ELECTRICAL

Voltage (max.): 5V
Current (max.): 1.5A
Higher current rating achievable, please contact PM for additional technical information
Contact Resistance: 50 milliohm max.
Dielectric Withstanding Voltage: 500V AC, 60s
Insulation Resistance: 100 Milliohm min.

MECHANICAL

Insertion Force to PCB: 20N max.
Mating Force: 45N max.
Unmating Force: 45N max.
Durability (min.): 20

PHYSICAL

Housing: High temperature plastic material
Plating:
Contact Area- 0.75 µm min. Gold (Au)
Solder Tail Area - 3.0 µm min. Tin (Sn)
Underplating - 1.25 µm min. Nickel (Ni)
PCB Thickness: 1.60mm
Operating Temperature: -40 to +85°C

Note: Molex reserves the right to delay or cancel production of the depicted product without additional notice. Please contact your Molex customer service representative for product availability.

www.molex.com/link/hsautolink.html