

# Automotive USB Solution – Mini HSBridge+

## MINI SIZE, 0.5MM PITCH, USB 3.2 GEN 1/GEN 2

Mini HSBridge+ connector comes with a standard USB Type C interface & smaller size. The connector has a header compliant with USCAR-30 and is performance tested according to USCAR-2. They are an ideal solution for in-vehicle connections with high data rates up to 10Gb/s supporting advanced infotainment, telematics, and camera devices across the automotive industries. The USB Type C interface helps in connecting the automobile with high bandwidth personal infotainment devices.

- Standard USB Type c interface
- 0.5mm pitch and smaller size(24\*14.3\*12.2mm)
- With CPA can meet USCAR2 V1 vibration
- Compliant with USB 3.2 Gen 2 performance
- TID certification
- Up to 5A current and 10Gb/s speed
- Operating temperature range from -40°C to +105°C



### TARGET MARKETS



### FEATURES

- Standard USB Type C interface
- 0.50mm pitch and smaller size (24\*14.3\*12.2mm)
- Compliant with USB 3.2 Gen 2 performance
- TID certification
- Features Connector Position Assurance (CPA)
- Optional code
- UL94V-0 rated high temperature resistant housing
- Operating temperature from -40°C to +105°C\*
- RoHS compliant

### BENEFITS

- Suitable for wide range of applications
- Saves space on the board
- Up to 5A current and 10Gb/s speed
- Meets USB IF requirement
- Meets USCAR-2 V1 vibration
- Meets Poka-yoke
- Suitable for wide range of application environments
- Suitable for automotive application environments
- Meets environmental, health, and safety requirement

## TECHNICAL INFORMATION

### MATERIAL

- Housing/Board Connector: PA4T+30GF
- Terminal (Mating Area): Au plated with 0.75µm (30µin) min
- Terminal (Solder Area): Gold flash
- Diecast: Zinc, Alloy 3
- Housing/Cable Side Connector: PBT
- Shell/Top & Bottom: Stainless Steel
- Clip: PBT

### ELECTRICAL PERFORMANCE

- Contact Resistance: < 40mΩ
- Insulation Resistance: > 100MΩ
- Temperature Rise: 55°C max.
- Dielectric Withstanding Voltage: < 100VAC max.

### MECHANICAL PERFORMANCE

- Durability:10 cycles
- Cable Retention Force: 110N min.
- Mating Force: 45N max.
- Unmating Force: 75N max.
- Vibration Level: USCAR-2 V1

### SPECIFICATION

- Amphenol Product Specification: HSBridge+ series
- USCAR-2/30

### ENVIRONMENTAL

- RoHS compliant

### PACKAGING

- Tape & Reel

### APPROVALS AND CERTIFICATION

- TID certification

### TARGET MARKETS/APPLICATIONS



USB Hub  
Domain Controller  
Infotainment  
USB Charger

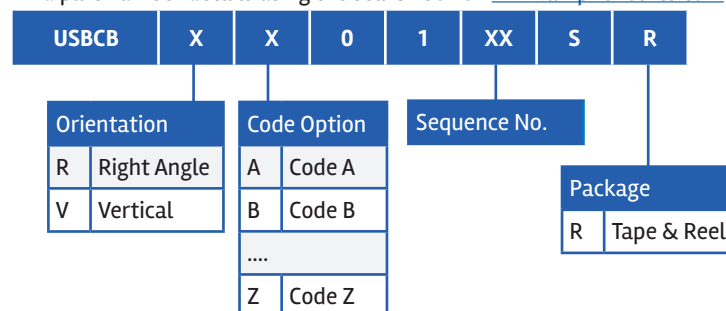
## PART NUMBERS

Description	Part Numbers
Mini HS+ Series / PCB Side connector/ A Code / R/A Dip /Black/Tape and Reel	USBCBRA0101SR
Mini HS+ Series / PCB Side connector/ Z Code / R/A Dip /Water Blue/Tape and Reel	USBCBRZ0101SR
Mini HS+ Series / PCB Side connector/ A Code / Vertical Dip /Black/Tape and Reel	USBCBVA0103SR

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

## PART NUMBER SELECTOR

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)



CM10MHSBGEPLS025EA4