

# **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



#### **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

# **►** Automotive USB Solution – Mini HSBridge+

### **TECHNICAL INFORMATION**

#### **MATERIAL**

- Housing/Board Connector: PA4T+30GF
- Terminal (Mating Area): Au plated with 0.75μm (30μ") 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: >  $100M\Omega$
- 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

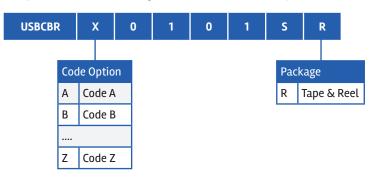
# **PART NUMBERS**

| 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 /Black/Tape and Reel | USBCBRZ0101SR |

Find part number details using the search box on <a href="www.amphenol-cs.com">www.amphenol-cs.com</a>

# PART NUMBER SELECTOR

Find part number details using the search box on www.amphenol-cs.com



CMIOMHSBGEPLS0524EA4