

Automotive USB Connectors and Cables – Mini HSBridge+

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

The Mini HSBridge+ connector features a miniature-size, automotive-grade standard USB Type-C interface in a compact form factor. It includes a header compliant with USCAR-30 and has been performance-tested in accordance with USCAR-2 standards. Designed for in-vehicle high-speed data transmission up to 10 Gb/s, it is an ideal solution for advanced infotainment systems, telematics, and camera applications across the automotive industry. The USB Type-C interface also enables seamless connectivity between the vehicle and high-bandwidth personal infotainment devices.

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



TARGET MARKETS



FEATURES

- Standard USB Type C interface
- 0.50 mm pitch and smaller size (24*14.3*12.2 mm)
- Compliant with USB 3.2 Gen 2 performance
- TID certification
- Features Connector Position Assurance (CPA)
- Optional code
- UL 94 V-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 5 A current and 10 Gb/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 requirements

TECHNICAL INFORMATION

MATERIAL

- Housing/Board Connector: PA4T+30GF
- Terminal (Mating Area): Gold plated with 0.75 µm (30 µin) 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: < 40 mΩ
- Insulation Resistance: > 100 MΩ
- Temperature Rise: 55 °C max.
- Dielectric Withstanding Voltage: < 100 V AC max.

MECHANICAL PERFORMANCE

- Durability: 10 cycles
- Cable Retention Force: 110 N min.
- Mating Force: 45 N max.
- Unmating Force: 75 N 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

PART NUMBER SELECTOR

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

USBCB	X	X	0	1	XX	S	R
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Orientation

R	Right Angle
V	Vertical

Code Option

A	Code A
B	Code B
....	
Z	Code Z

Sequence No.

Package

R	Tape & Reel
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WHERE INNOVATION CONNECTS

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