

USB 4 Gen 3 Type C

MULTI-PROTOCOL, HIGH SPEED USB SOLUTION FOR NEXT GENERATION DESIGNS

USB 4 connectors compatible with Thunderbolt 4 interface combines power charging, tunneling USB, PCIe® data transfer, and DP video and audio capability in a single Type C connector. With a power rating up to 100W, these connectors have a high speed data transmission rate of up to 40Gb/s. The USB 4 connectors are ideal for applications in Storage, Notebook (Laptops), Tablet, Docking, Peripherals (Monitor/Display, Projector), Automotive Infotainment, Home Entertainment, etc.

- Power delivery up to 100W high-speed transmission up to 40Gb/s
- High-speed transmission up to 40Gb/s reversible plug and cable orientation
- Support 4K UHD 60Hz display
- Reversible plug and cable orientation
- All-in-one simplicity



TARGET MARKETS



FEATURES

- High-speed transmission up to 40Gb/s
- Excellent copper alloy material for terminals design
- Supports Display Port protocol
- Support power delivery, data transfer, video output in one connector
- Reversible plug and cable orientation for better user experience
- Up to 10,000 mating cycles
- Wiggle free

BENEFITS

- High speed data communication
- Extended 5A current rating for USB power delivery and up to 100W
- Drive multiple 4K UHD at 60Hz
- All-in-one simplicity
- Tailored for emerging product designs
- Enhanced durability and reduced wear-out from cyclic operation
- Enhanced side wall of middle plate maximizes the contact area and stabilizes contact performance

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP UL94-V0
- Molding Housing: Black, high temperature plastic
- Top Terminal: Copper alloy
- Bottom Terminal: Copper alloy
- Mid Plate: Stainless steel
- Outer Shell: Stainless steel
- Main Shell: Stainless steel
- Small Shell: Stainless steel

MECHANICAL PERFORMANCE

- Durability: 10000 cycles
- Insertion Force: 5~20 N
- Extraction Force: 8~20 N

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 40mΩ max.
- Insulation Resistance: 100mΩ min.
- Contact Current Rating: 5A max.
- Dielectric Withstanding Voltage: 100VAC

PACKAGING

- Tape & Reel

SPECIFICATION

- Amphenol Product Specification

APPROVALS AND CERTIFICATIONS

- RoHS
- Halogen Free

ENVIRONMENTAL

- Operating Temperature Range: -40°C to +85°C

TARGET MARKETS/APPLICATIONS



Automotive Infotainment



Notebook
Docking
Tablet
Peripherals (Monitor/Display, Projector...)
Home Entertainment



Storage

PART NUMBERS

Description	Part Numbers	TID Number
USB4 Gen3, Type C, Receptacle, R/A, Top mount, Dual Row SMT, Center Height 1.57 mm	12402056E512A	TID 5107
USB4 Gen3, Type C, Receptacle, R/A, Top mount, Dual Row SMT, Center Height 1.57mm	12402073E512A	TID 5793
USB4 Gen3, Type C, Receptacle, R/A, Mid mount, Dual Row SMT, Center Height 0.47mm	12402075E512A	TID 5106
USB4 Gen3, Type C, Receptacle, R/A, Top mount, Dual Row SMT, Center Height 1.58 mm	GSB4D313302Y1HR	TID 4731
USB4 Gen3, Type C, Receptacle, R/A, Top mount, Dual Row SMT, Center Height 1.58mm	GSB4D313302AY1HR	TID 5489
USB4 Gen3, Type C, Receptacle, R/A, Mid mount, Dual Row SMT, Center Height -0.1mm	12402072E512A	TID 6290
USB4 Gen3, Type C, Receptacle, R/A, Top mount, Dual Row SMT, Center Height 1.57mm	12402076E512A	TID 6287
USB4 Gen3, Type C, Vertical, Dual Row SMT, IPX8	12402082E512A	Coming Soon