

USB 3.2 Type C

USB 3.2 GEN 1 (5 GB/S), USB 3.2 GEN 2 (10 GB/S), USB 3.2 GEN 2×2 (20 GB/S), USB TYPE C COMPLIANT, HIGH-SPEED SOLUTION

USB 3.2 High-Speed Type C is an emerging standard interface, expected to see widespread adoption across consumer, industrial, and automotive devices.

- Compliant with USB Type C specification
- High-speed transmission up to 20 Gb/s super speed
- Power rating up to 240 W
- Optimized contact design for superior signal integrity performance
- Reversible plug and cable orientation



TARGET MARKETS



FEATURES

- High-speed transmission up to 20 Gb/s
- High-power and fast charging
- Various mounting types (Top, Middle, Vertical)
- Reversible plug orientation ensures easy insertion
- Mid-plate tongue design
- All-in-one simplicity

BENEFITS

- High-speed data communication
- Extended 5 A current rating for USB Power delivery and up to 240 W
- Offer design flexibility
- Connect cable without worrying about the plug's orientation or the cable's direction
- Ensure high reliability while preventing damage from connector mishandling
- Support power delivery, data transfer, video output in one connector

TECHNICAL INFORMATION

MATERIAL

- Housing: PA46 or LCP, Receptacle: PA46 or LCP
- Molding Housing: Black, High-temperature Plastic
- Top Terminal: Copper Alloy
- Bottom Terminal: Copper Alloy
- Mid Plate: Stainless steel, Nickel 30 μ min.
- Outer Shell: Stainless steel, Solder Nickel 30 μ min.
- Main Shell: Stainless steel, NI plated or Cleaning
- Small Shell: Stainless steel, NI plated or Cleaning
- LIM: Silica gel, Black

MECHANICAL PERFORMANCE

- Durability: 10,000 cycles
- After Durability Extraction Force: 6~20 N
- Insertion Force: 5~20 N
- Extraction Force: 8~20 N

ELECTRICAL PERFORMANCE

- Low-level Contact Resistance: 40 m Ω max.
- Insulation Resistance: 100 m Ω min.
- Contact Current Rating: 5 A max.
- Dielectric Withstanding Voltage: 100 VAC

PACKAGING

- Tape & Reel

SPECIFICATION

- Amphenol Product Specification: SSN002

APPROVALS AND CERTIFICATIONS

- RoHS
- Halogen-free

ENVIRONMENTAL

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

TARGET MARKETS/APPLICATIONS



Wearable Devices
Power Banks
Smart Home Devices
E-Cigarettes
TWS (True Wireless Stereo) Headphone Markets

PART NUMBERS

Description	Part Numbers
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.58 mm, Dual Row SMT	12401598E4#2A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.58 mm, Dual Row SMT	12401610E4#2A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.58 mm, Dual Row SMT	12401832E402A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.58 mm, Dual Row SMT	12401824E412A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.58 mm, Dual Row SMT	12401808E412A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.75 mm, Dual Row SMT	12402499E512A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Mid mount, Center Height 1.10 mm, Dual Row SMT	124018402112A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Top mount, Center Height 1.57 mm, Dual Row SMT	12402143E512A
USB 3.2 Gen 2, Type C, Receptacle, R/A, Mid mount, Center Height 0.47 mm, Dual Row SMT	12402144E512A
USB 3.2 Gen 2, Type C, Vertical, Length 12 mm, Dual Row SMT	12401951E412A
USB 3.2 Gen2, Type C, Vertical, Length: 10.95 mm, Dual Row SMT	12402313E512A
USB 3.2 Gen 2 Type C, Plug, Length 9.7 mm, Dual Row SMT	12402405E402A
USB 3.2 Gen 1, Type C, Vertical, Length 6.5 mm, Dual Row SMT	12402032E202A
USB 3.2 Gen 1, Type C, Vertical, Length 6.5 mm, Dual Row SMT	12402069E202A
USB 3.2 Gen 1, Type C, Receptacle, R/A, Top mount, Center Height 1.68 mm, Dual Row SMT	GSB3C3133DSYHR
USB 3.2 Gen 1, Type C, Receptacle, R/A, Top mount, Center Height 1.93 mm, Dual Row SMT	GSB3C31331DYHR

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

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