

# USB Type C Connectors and Cables



Expanded family USB Type-C connectors offer robust, reliable connectivity in IoT, wearable device and other high-speed data I/O applications

## Features and Benefits

3 insert-molding processes are applied to make the mating tongue one complete part to minimize water ingress

3 insert-mold processes also eliminate the risk of lifted (or bent) terminals resulting in higher electrical reliability and mechanical durability of the interconnect



Type C-to-A USB 2.0 Cable, 22 (Type C) and 4 (Type A) Circuits, 480 Mbps, 1.0m (68798-0001)



Type C-to-C USB 2.0 Cable, 22 Circuits each, 480 Mbps, 1.0m (68798-0002)



Type C-to-C USB 3.1 Cable, 22 Circuits each, Gen 1/5 Gbps, 1.0m (68798-0003)



Type C-to-C USB 3.1 Cable, 22 Circuits each, Gen 2/10 Gbps, 0.80m (68798-0004)



Type C-to-A USB 2.0 Cable, 22 (Type C) and 4 (Type A) Circuits, 480 Mbps, 1.0m (68798-0005)



Type C-to-A USB 3.0 Cable, 22 (Type C) and 9 (Type A) Circuits, Gen 1/5 Gbps, 1.0m (68798-0007)



Type C-to-C USB 2.0 Cable, 100W, Power Delivery, 22 Circuits each, 480 Mbps, 1.0m (68798-0008)



Type C-to-A USB 2.0 Cable, 22 (Type C) and 4 (Type A) Circuits, 480 Mbps, 1.0m (68798-0009)



Type C-to-C USB 2.0 Cable, 22 Circuits each, 480 Mbps, 1.0m (68798-0010)

# USB Type C Connectors and Cables



## Applications

### Consumer

- Electronic watches
- Smartphone / Wireless Charger
- Power banks

### Aviation

- In-flight entertainment systems

### Industrial and Commercial

- Identity door locking systems
- Oscilloscopes
- Air purification systems
- Projectors
- Point-of-sale registers
- ATM

### Medical

- Glucometer
- Electronic Inhaler



Electronic Watches



In-flight Entertainment Systems



Automated Teller Machines



Mobile Phones and Tablet PCs



Office Equipment

## Specifications

### REFERENCE INFORMATION

Packaging: Tape and reel  
 UL File No.: NA  
 CSA File No.: NA  
 Mates With: 68798 series with 105450/105454/105455/201267/202410  
 Terminal Used: Copper Alloy  
 Designed In: Millimeters  
 RoHS: Yes  
 Halogen Free: Yes

### ELECTRICAL

Voltage (max.): 30V (DC/AC) max.  
 Current (max.): 5.0A  
 Contact Resistance:  
 40mΩ (initial) max.; 50 milliohm max. after test  
 Dielectric Withstanding Voltage: 100 VAC  
 Insulation Resistance: 100 Megohm min.

### MECHANICAL

Contact Retention to Housing: Insert molded type  
 Insertion Force to PCB: Zero Insertion Force  
 Mating Force: 5 to 20N  
 Unmating Force:  
 8 to 20N (1-30 cycles); 6 to 20N (after 10,000 insertion/extraction cycles)  
 Durability (min.): 10,000 cycles

### PHYSICAL

Housing:  
 Receptacle: High-temperature Nylon  
 Plug: LCP  
 Contact: Copper Alloy  
 Plating:  
 Contact Area — Receptacle: Gold Flash over 0.75micron min. Palladium/Nickel (Pd/Ni) or 0.75micron min. Gold (Au)  
 Plug: 0.76micron min. Gold (Au)  
 Solder Tail Area —  
 Receptacle: 0.025 micron Gold (Au) min.  
 Plug: 3.05micron min. Matte Tin (Sn)  
 Underplating — Nickel (Ni) overall  
 PCB Thickness:  
 Receptacle: 0.60 to 0.80mm (105450, 105454, 105455, 202410); 1.60mm (201267)  
 Plug: 0.80mm  
 Operating Temperature: -30 to 85°C

## Ordering Information

Series No.	Design	Product Configuration	USB Standard /Data Speed
<a href="#">105450</a>	Standard Type	Top-mount Right Angle Receptacle	USB 3.1 Gen 2 speed
<a href="#">105454</a>	Standard Type	Mid-mount Right Angle Receptacle, Dual-Shell	USB 3.1 Gen 2 speed
<a href="#">105455</a>	Standard Type	Mid-mount Right Angle Receptacle, Single-Shell	USB 3.1 Gen 2 speed
<a href="#">201267</a>	Standard Type	Top-mount Right Angle Receptacle, 0.35mm Stand-off	USB 3.1 Gen 2 speed
<a href="#">202410</a>	Waterproof version	Mid-mount Right Angle Receptacle	USB 3.1 Gen 1 speed
<a href="#">105444</a>	Standard Type	Straddle-mount Cable Plug, Dual-row, 22-circuit	USB 3.1 Gen 2 speed
<a href="#">68798</a>	Standard	Type C-to-A, Type C-to-C	USB 2.0, USB 3.0 and USB 3.1

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