

# USB Type C Connector and Cable Assembly

## COMPACT AND RELIABLE

USB Type C standard receptacles provide multifunction single cable solution for data, power, audio and video. The small form factor made this interconnection a unquestioned technology across all devices. The reversible design enables quick and easy connections, no matter which way it is inserted. 16-pin Type-C is more economical solution to support 20V/5A 100W power charge and speed up to 480Mb/s. We also offer cable assembly for power charge.

- Data rate up to 480Mb/s
- Power Delivery up to 20V/5A 100W
- Reversible plug and cable orientation
- Slim and sleek design
- Better EMI shielding design
- Economical
- One-stop solution



### TARGET MARKETS



## FEATURES

- Support speed 480Mb/s and power charge
- Economical
- Reversible plug and cable orientation
- Robust and small form factor design
- Better EMI (Electromagnetic Interference) shielding design
- RoHS compliant and lead-free
- RoHS compliant and lead-free

## BENEFITS

- Minimizes user waiting time
- Ready for next-generation applications
- Ensures quick and easy connections whichever way it is inserted
- Tailored for emerging product designs
- Suitable for applications in very thin platforms and the I&M market
- Protects against EMI and ESD (Electromagnetic Discharge)
- Flexible solution for different applications
- Promotes application flexibility
- Hot plugging capability
- Meets environmental, health and safety requirements

### TECHNICAL INFORMATION

#### MATERIAL

- Housing: High temperature thermoplastic
- Shell: Stainless steel
- Terminal: Copper alloy

#### MECHANICAL PERFORMANCE

- Mating Force: 5N to 20N
- Durability: 10,000 mating cycles

#### ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 40mΩ max.
- Insulation Resistance: 100MΩ min.
- Data Rate: 480Mb/s
- Voltage Rating: 5V AC/DC
- Current Rating:
  - 5.0A for VBUS and GND
  - 1.25A for VCONN and GND
  - 0.25A for all other contacts
- Dielectric Withstand Voltage: 100V AC for 1 minute

#### ENVIRONMENTAL

- Operating Temperature Range: -25°C to 85°C

#### SPECIFICATIONS

- Amphenol Product Specification:
  - GS-12-1613
  - GS-12-1588

#### PACKAGING

- Tape & Reel

#### TARGET MARKETS/APPLICATIONS



Infotainment



Adaptor  
Flash Drive  
Laptop  
Phone  
Portable Power Bank  
Portable HDD  
Tablet  
Wearable Device



Motherboard Add-on Card  
Storage Adaptor  
Storage Enclosure



Factory Automation Equipment  
Industrial Equipment

### PART NUMBERS

Description	Orientation	Mounting Style	Plating	Part Numbers
USB Type C 16pin Receptacle	Right Angle	Top mount SMT	G/F	10155435-00011LF
USB Type C 16pin Receptacle	Right Angle	Top mount SMT	30μin	10155435-00021LF
USB Type C 16pin Receptacle	Right Angle	Top mount SMT	15μin	10155435-00031LF
USB Type C 16pin Receptacle	Right Angle	Mid mount SMT	G/F	10155679-00011LF
USB Type C 16pin Receptacle	Right Angle	Mid mount SMT	30μin	10155679-00021LF
USB Type C 16pin Receptacle	Right Angle	Mid mount SMT	15μin	10155679-00031LF

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### TECHNICAL INFORMATION

#### MATERIAL

- Housing: High temperature thermoplastic
- Shell: Stainless steel
- Terminal: Copper alloy
- Cable: No UL 30AWG\*1P+24AWG\*2C+AL TPE jacket, black, OD:3.50mm
- Inner-mold: LD-PE transparent
- Over-mold: TPE black

#### MECHANICAL PERFORMANCE

- Mating Force:
  - 35N max. (Type A plug)
  - 5N-20N (Type C plug)
- Unmating Force:
  - 10N min. (Type A plug)
  - Initial 8N-20N; after 10k cycle: 6N-20N (Type C plug)
- Durability: 1500 mating cycles
- Bending: 1000 cycles

#### ELECTRICAL PERFORMANCE

- Voltage Rating: 5V
- Current Rating: 1.5A max.
- Conductor resistance: 5Ω max.
- Insulation resistance: ≥10MΩ/KM
- Dielectric strength for 1 min.: 300V DC

#### ENVIRONMENTAL

- Operating Temperature Range: 5°C to 40°C

### PART NUMBERS

Description	Color	Length	Part Numbers
USB Cable Round Type A - Type C	Black	0.5M	10152943-Z0500YBLF
USB Cable Round Type A - Type C	Grey	0.5M	10152943-Z0500YGLF
USB Cable Round Type A - Type C	White	0.5M	10152943-Z0500YWLF
USB Cable Round Type A - Type C	Black	1M	10152943-Z0100YBLF
USB Cable Round Type A - Type C	Grey	1M	10152943-Z0100YGLF
USB Cable Round Type A - Type C	White	1M	10152943-Z0100YWLF
USB Cable Round Type A - Type C	Black	1.27M	10152943-Z0130YBLF
USB Cable Round Type A - Type C	Grey	1.27M	10152943-Z0130YGLF
USB Cable Round Type A - Type C	White	1.27M	10152943-Z0130YWLF

#### SPECIFICATIONS

- Amphenol Product Specification: GS-12-1577

#### PACKAGING

- Bag and Carton

#### TARGET MARKETS/APPLICATIONS



Infotainment



Adaptor  
Flash Drive  
Laptop  
Phone  
Portable Power Bank  
Portable HDD  
Tablet  
Wearable Device



Motherboard Add-on Card  
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Factory Automation Equipment  
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BASICUSBCCA0520EA4