

USB Type C Connector and Cable Assembly

COMPACT, BLIND MATING, SUPER SPEED UP TO 40GB/S

Amphenol FCI USB Type C connector is a compact, reversible interface that enables high-speed data transfer and power delivery. Ensures quick and seamless file transfers and multimedia streaming. It can be plugged in either way, eliminating the hassle of trying to align the connector correctly. It supports scalable power delivery up to 240 W and speed up to 40 Gb/s.

- Small form factor
- Reversible plug orientation
- Supports super speed up to 40 Gb/s
- Scalable with various I/O connectors
- Up to 20,000 mating cycle



TARGET MARKETS



FEATURES

- Small form factor
- Reversible plug orientation
- Support super speed 40 Gb/s
- Scalable with various I/O connectors
- Up to 20,000 mating cycle
- Better EMI (Electromagnetic Interference) shielding design
- RoHS compliant and lead-free

BENEFITS

- Save the space of chassis, perfectly fit to portable devices
- Ensures quick and easy connection whichever way it is inserted
- Minimize the user waiting time
- One interface but compatible with HDMI / DP / RJ45 / VGA through conversion hub
- Perfectly fit for long term use of frequently plugged consumer products
- Protects against EMI and ESD (Electromagnetic Discharge)
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION – CONNECTOR

MATERIAL

- Housing: High temperature thermoplastic
- Terminal Base Material: Copper Alloy
- Plating: Gold flash on contact area

MECHANICAL PERFORMANCE

- Durability: 10,000 cycles
- Insertion Force: 5 N–20 N
- Withdraw Force: 8 N–20 N

ELECTRICAL PERFORMANCE

- Current Rating: 3.0 A continuous
- LLCR: 40 mΩ max. initial, $\Delta R \leq 10$ mΩ after reliability test
- Insulation Resistance: 100 MΩ
- Voltage Rating: 100 VAC/VDC
- Withstanding Voltage: 500 VAC RMS 60 Hz
- Current Rating:
 - 5.0 A for VBUS and GND
 - 1.25 A for Vconn and GND
 - 0.25 A for all other contacts

PACKAGING

- Receptacle: Tape and Reel
- Plug: Tray

SPECIFICATIONS

- Product Specification: GS-12-1351

ENVIRONMENTAL

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

TARGET MARKETS/APPLICATIONS



Infotainment



Phone
Smart Devices
Gaming Box
Portable HDD



Laptop
Desktop

TECHNICAL INFORMATION – CABLE ASSEMBLY

MATERIAL

- Housing: High temperature thermoplastic
- Shell: Stainless Steel
- Terminal: Copper Alloy
- Inner-mold: LD-PE transparent
- Over-mold: TPE or PVC

MECHANICAL PERFORMANCE

- Mating Force:
 - 35 N max. (Type A plug)
 - 5 N–20 N (Type C plug)
- Un-mating Force:
 - 10 N min. (Type A plug)
 - Initial 8 N–20 N; after 10k cycle: 6 N–20 N (Type C plug)
- Durability: 10000 mating cycles
- Bending: 1000 cycles

ELECTRICAL PERFORMANCE

- Current Rating: 2 A / 3 A / 5 A
- Voltage Rating: 5 V / 24 V / 48 V
- Conductor Resistance: 5 Ω max.
- Insulation Resistance: ≥ 10 MΩ/KM
- Dielectric Strength for 1 min.: 300 VDC

PACKAGING

- Receptacle: Bag and Carton

SPECIFICATIONS

- Product Specification: GS-12-1577

ENVIRONMENTAL

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

TARGET MARKETS/APPLICATIONS



Infotainment



Phone
Smart Devices
Gaming Box
Portable HDD



HMI

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