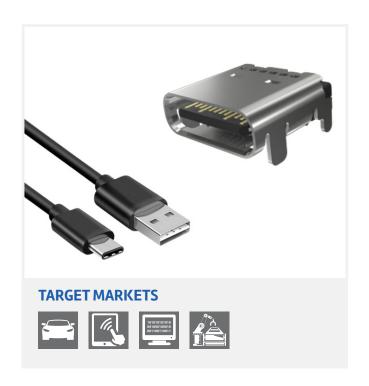# USB Type C Connector and Cable Assembly

COMPACT, BLIND MATING, SUPER SPEED UP TO 20GB/S

USB Type C is the future of the USB technology providing multifunction, single cable solution for Data, Power, Audio and Video. The slim form factor supports the evolving design trends. The reversible design enables quick and easy connections no matter which way it is inserted. It supports scalable power delivery up to 100W and performance speed up to 20Gb/s.

- Small form factor
- Reversible plug orientation
- Supports super speed up to 20Gb/s
- Scalable with various I/O connectors
- Up to 10,000 mating cycle

TARGET MARKETS

FEATURES	BENEFITS
Small form factor	Save the space of chassis, perfectly fit to portable devices
Reversible plug orientation	Ensures quick and easy connection whichever way it is inserted
Support super speed 20Gb/s	Minimize the user waiting time
Scalable with various I/O connectors	One interface but compatible with HDMI/DP/RJ45/VGA through conversion hub
Up to 10,000 mating cycle	Perfectly fit for long term use of frequently plugged consumer products
Better EMI (Electromagnetic Interference) shielding design	Protects against EMI and ESD (Electromagnetic Discharge)
RoHS compliant and lead-free	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: 5–20N
- Withdraw Force: 8–20N

ELECTRICAL PERFORMANCE

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

HMI

PART NUMBERS

Descrption	Mount Type	Pin Count	Part Numbers
USB 3.2 Type C GEN 2 Receptacle Right Angle SMT	Top Mount	24	10152803–00011LF
USB 3.2 Type C GEN 2 Receptacle Right Angle Hybrid	Top Mount	24	10159872–00011LF
USB 3.2 Type C GEN 2 Receptacle Vertical SMT	Top Mount	24	10157529–00111LF
USB 3.2 Type C GEN 2 Receptacle Right Angle SMT	Middle Mount	24	10137064–00011LF
USB 3.2 Type C GEN 2 Receptacle Right Angle High rise	Top Mount	24	10163259–00011LF
USB 3.2 Type C GEN 1 Receptacle Right Angle Hybrid IP67	Top Mount	24	10164986–00011LF
USB 2.0 Type C Receptacle Right Angle SMT Single Row	Top Mount	16	10155435–00011LF
USB 2.0 Type C Receptacle Upright Through Hole	Top Mount	14	10151348–00011LF
USB Type C Charging Receptacle Right Angle SMT	Top Mount	6	10164359–00011LF
USB 3.2 Type C GEN 2 Plug	Straddle	24	10133475–10001LF
USB 3.2 Type C GEN 2 Plug	Vertical SMT	24	10160261–00011LF

TECHNICAL INFORMATION – CABLE ASSEMBLY

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 or PVC

MECHANICAL PERFORMANCE

- Mating Force:
- 35N max. (Type A plug)
- 5N-20N (Type C plug)
- Un-mating 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

- Current Rating: 3.0A continuous
- Voltage Rating: 5V
- Current Rating: 1.5A max.
- Conductor Resistance: 5Ω max.
- Insulation Resistance: ≥10MΩ/KM
- Dielectric Strength for 1 min.: 300V DC

PACKAGING

- 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

Laptop
Desktop

HMI

PART NUMBERS

Descrption	Color	Length	Part Numbers
USB Cable Round Type A – Type C	Black	0.5M	10152943-Z0500YBLF
USB Cable Round Type A – Type C	White	0.5M	10152943-Z0500YWLF
USB Cable Round Type A – Type C	Black	1.0M	10152943-Z0100YBLF
USB Cable Round Type A – Type C	White	1.0M	10152943-Z0100YWLF
USB Cable Round Type C – Type C	Black	0.3M	10165794-Z0030YBLF
USB Cable Round Type C – Type C	White	0.3M	10165794-Z0030YWLF
USB Cable Round Type C – Type C	Black	1.0M	10165794-Z0100YBLF
USB Cable Round Type C – Type C	White	1.0M	10165794-Z0100YWLF

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