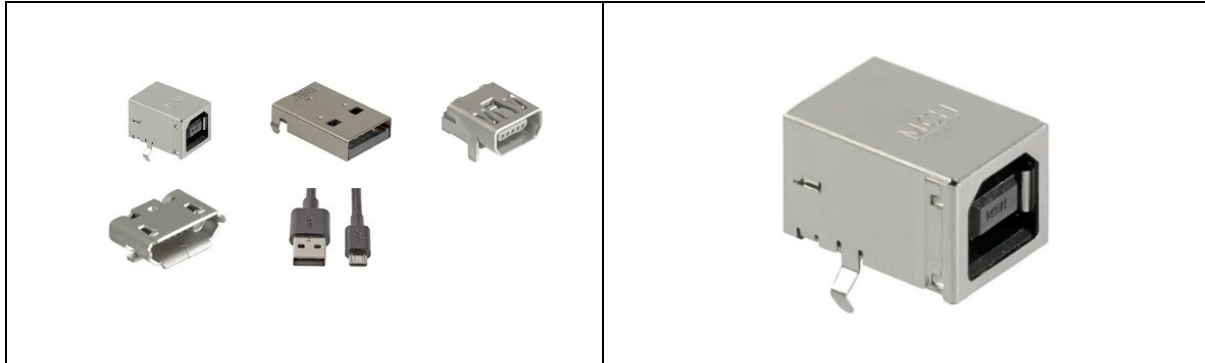


USB Products and Solutions

The compact Type-C Connectors and Cables expanded family supports up to 10 Gbps speeds and offers robust, reliable connectivity in IoT, wearable device and other high-speed data I/O applications



USB 2.0 Type-B

USB Type-C connectors and cables that do not comply with the required USB specifications have been known to cause electrical issues to computers, smartphones, tablets and other mission-critical devices. Such damages can be costly in terms of hardware, time, productivity and safety. Molex's USB Type-C connectors use high-temperature Nylon or Nylon 64 as housing material and a 3-tier insert-molding process to ensure high-mating durability and electrical reliability of the connector. The connector's mating tongue design protects the interconnect from possible damage caused by mishandling, shipment or assembly processes.

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Makers of electronic devices using USB Type-C connectors need compact designs to optimize costly PCB real estate. Molex's short-body USB Type-C connector designs with short mating depth provide space-saving solutions.

Features and Benefits

USB 3.1, Type-C

Plugs and receptacles support 5.0A current

Reduce battery-charging time by 64% compared to micro-USB 2.0's 1.8A current rating

USB 3.1, Type-C

High-temperature Nylon insert-mold receptacle housing

Increases connector strength to reduce potential shorting between mid-plate and terminals

USB 2.0, Micro-B

IP67-rated waterproof option available

Withstands post-solder reflow while preventing water ingress

Metal shielding on all sides

Superior shielding against RFI and EMI

Simple edge-contact beam geometry of connector shell

Facilitates high-speed data transmission

USB 3.1, Type-C

Mid-plate connector tongue design in receptacle

Ensures high reliability while preventing damage from connector abuse

USB 3.0

Blue Housing (industry standard)

Backward compatible with USB 2.0 and 1.1

Over-mode process used for receptacles

Increases component mechanical rigidity and terminal retention

Beveled metal pins

Provides ground to PCB and strong board retention

Grounding fingers

Ground mating halves

Applications

Automotive

- Comfort
- Driver assistance systems / convenience
- Infotainment systems

Commercial Aviation

- In-flight entertainment Mobile devices

Connected Home

- Smart home systems

Consumer

- Copiers
- DVD Players
- Digital camera
- Digital media players
- Digital video camera
- Electronic watches
- Graphic cards
- LCD and TV panel
- Notebook PC
- PCs/Laptops
- Power banks
- Printers
- Set Top Boxes
- Smartphones/Wireless chargers
- TVs
- Video games

Industrial

- ATM Machines
- Air purification systems

- Identity door-locking systems
- Oscilloscopes
- Point-of-sale registers
- Projectors

Medical

- Electronic inhalers
- Glucose meters
- PC Monitors

Smart Phones and Mobile Devices

- GPS
- MP3 and music player
- Mobile phone
- Tablets

Telecommunications

- Handsets
- ISDN
- PBXs

This is not a definitive list of applications for this product. It represents some of the more common uses.