

## Amphenol ICC

# **USB Type C Connector System**

### SCALABLE, SUPERSPEED CONNECTOR SYSTEM

USB Type C connectors are expected to be widely used as a next-generation interface. They support a variety of protocols such as USB2.0/3.0/3.1 and meet Superspeed communication 10Gb/s, 5A and 20V power supply.

The usability for USB 3.1 Type C connector is enhanced also by its low profile and reversible product design. It is ideal for emerging product designs.

- Reversible plug and cable orientation
- Meets USB 3.1/3.0/2.0 speed performance
- Supports high speed transmission up to 10Gb/s
- Extended 5A current rating for USB Power delivery
- Vertical, right angle and straddle mount configurations and waterproof type available

### **FEATURES**

- Tailored for emerging product designs
- Similar size as Micro USB
- Supports high speed transmission up to 10Gb/s
- Extended 5A current rating for USB Power delivery
- Designed to establish future USB performance needs
- Up to 10,000 mating cycles



#### BENEFITS

- Reversible plug and cable orientation for better user experience
- Smaller connector size saves space
- Meets USB 3.1 specification
- Backward compatible with USB 2.0/3.0 to meet different application requirements
- Meets USB power delivery protocol
- Supports audio and video signal output with alternate mode
- Enhanced durability

## **TECHNICAL INFORMATION**

#### MATERIAL

- Housing: High Temperature Polymer, UL94V-0, Black
- Contact: Copper Alloy
- Shell: Stainless Steel

#### **MECHANICAL PERFORMANCE**

- Insertion Force: 5N to 20N
- Extraction Force: 8N to 20N
- Extraction Force (after durability): 6N to 20N
- Durabilty: 10,000 mating cycles

#### **ELECTRICAL PERFORMANCE**

- Contact Resistance: 40m  $\Omega$  max. initial for VBUS, GND and all other contacts
- Insulation Resistance: 100m $\Omega$  min. initial
- Dielectric Withstanding Voltage: 100V AC

#### PACKAGING

Tray/Tape and Reel available upon request

#### **SPECIFICATION**

 Amphenol Product Specification: USB Type C Series Spec

### **APPROVALS AND CERTIFICATIONS**

RoHS

### **PART NUMBERS**

#### **ENVIRONMENTAL**

- Humidity: 40±2°C, 90 to 95%(RH), for 96 hours
- Temperature Life: 105±2°C for 120 hours

### **TARGET MARKETS/APPLICATIONS**



Charger Car Media Player/Hub



Telecommunication



Connector Hub Flash Disk Mobile Phone/Tablet VR Camera



#### Hard Disk Drives Solid State Drives



Industrial Computer POS System



Medical

Product	Description	Part Numbers
USB 3.1 Gen 2 Type C Receptacle	Right angle, Top mount dual SMT, 0.9mm shell tab	12401610E4#2A
USB 3.1 Gen 2 Type C Receptacle	Right angle, Top mount dual SMT, 2.1mm shell tab	12401598E4#2A
USB 3.1 Gen 2 Type C Receptacle	Right angle, Top mount dual SMT, 1.3mm shell tab	12401832E4#2A
USB 3.1 Gen 2 Type C Receptacle	Right angle, Top mount dual SMT, for 1.6mm PCB	12401826E412A
USB 2.0 Type C Receptacle	Right angle, Mid mount SMT	12401834E412A
USB 3.1 Gen 2 Type C Receptacle	Right angle, Mid mount SMT, Short type	124018402112A
USB 3.1 Gen 2 Type C Receptacle	Right angle, Top mount SMT, High-rise type	GSB4C3JXXXHHHR
USB 3.1 Gen 1 Type C Receptacle	Right angle, Mid mount SMT, IPX8 waterproof	1240183121#2A
USB 3.1 Gen 1 Type C Receptacle	Right angle, Top mount Hybrid, Double shells	GSB3CA1X315HHR
USB 3.1 Gen 2 Type C Receptacle	Vertical	12401661E4#2A
USB 3.1 Type C Plug	Straddle mount	GSB3C71X313HHR

#### Disclaimer

Please note that the above information is subject to change without notice.