Waterproof USB Type C

SCALABLE, SUPERSPEED CONNECTOR SYSTEM

Waterproof USB Type C Connectors are expected to be widely used as a next-generation interface. They support a variety of protocols such as USB 2.0, USB 3.1 Gen 1, Gen 2 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
- Right angle stand-off and straddle mount configurations and waterproof type available

TARGET MARKETS

- Waterproof USB Type C
- 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
- Right angle stand-off 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
- Excellent copper alloy material for terminals design
- 24 pin assignment for different kinds of protocol requirements
- Up to 10,000 mating cycles
- Waterproof glue, O-ring added and liquid insert-mold implemented in the front end of the shell

BENEFITS

- Reversible plug and cable orientation for better user experience
- Smaller connector size saves space
- Meets USB 3.1 Gen 1 and Gen 2 specifications
- Backward compatible with USB 2.0
- Extended 5A current rating for USB Power delivery
- Supports audio and video signal output with alternate mode
- Enhanced durability
- Meets IPX2 to IPX8 ratings
**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
- Durability: 10,000 mating cycles

**ELECTRICAL PERFORMANCE**
- Contact Resistance: 40mΩ max. initial for VBUS, GND and all other contacts
- Insulation Resistance: 100mΩ min. initial
- Dielectric Withstanding Voltage: 100V AC

**PACKAGING**
- Tray/Tape and Reel available upon request

**SPECIFICATION**
- Amphenol Specification: USB Type-C Receptacle

**APPROVALS AND CERTIFICATIONS**
- RoHS

**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
- Connector Hub
- Flash Disk
- Mobile Phone/Tablet
- VR Camera
- Hard Disk Drives
- Solid State Drives
- Industrial Computer
- POS System
- Medical

**PART NUMBERS**

<table>
<thead>
<tr>
<th>USB Version</th>
<th>Data Rate</th>
<th>No. of Contacts</th>
<th>Orientation</th>
<th>Level of Liquid Ingress Protection</th>
<th>Center Height</th>
<th>Shell Feature</th>
<th>Termination Type</th>
<th>Part Numbers</th>
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<tbody>
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<td>10Gb/s</td>
<td>24</td>
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