

FEATURES AND SPECIFICATIONS



**0.65mm (.025") Pitch
Micro-USB**

New Micro-USB interconnect solutions set standard for sleeker mobile devices

USB Implementers Forum, Inc. (USB-IF) has finalized the specification of the Micro-USB technology in early January 2007. The development of this new connector technology has given the opportunity for portable device and mobile phone makers to further reduce their real estate in their applications. The Micro-USB will replace most of the Mini-USB plugs and receptacles that are currently being used. The specification of the Micro-USB supports the current USB On-The-Go (OTG) supplement. This allows communication between portable devices without going through a host. Being much smaller than the Mini-USB, the Micro-USB is the choice of interconnect solution of mobile phone makers such as Nokia and Motorola for their new phone designs.

Molex has developed the Micro-USB 'B' receptacle in standard and mid-mount version. The design comes with a lead-in feature for blind mating. The mid-mount version features a unique laser-welded shield design, ensuring mechanical seam strength and rigidity of the connector body, which helps prevent damage to the plug or receptacle as the result of any perpendicular or horizontal (wrenching) stress. Both connectors are specified for up to 10,000 insertion cycles. To ensure maximum receptacle to PCB retention, wide side tabs are employed. The beveled 'B'-style mating profile design prevents mis-mating with 'A'-type plug.

As a member of the USB Implementer Forum, Molex's ensure a high level of application connectivity and reliability.

47346

Standard 'B' receptacle

47491

Mid Mount 'B' receptacle



Features and Benefits

- Wider side solder tabs provide improved solder retention
- Stainless steel shell (0.3mm thick) provides high mating durability & strength
- Lead-in features provide blind mate
- Fold-down tabs provide high housing retention
- Latching windows with angular tabs prevent accidental unmating of plug
- Beveled profile 'B' style to lock out 'A'-type plug
- Unique laser-welded shield design strengthen wrenching strength during use
- Pick & place area (3mm diameter) enhances assembly process
- Rear shield for EMI protection (for standard mount)

SPECIFICATIONS

Reference Information

Packaging: Embossed Tape and Reel

UL File No.:

CSA File No.:

Mates With:

Designed In: mm

Electrical

Voltage: 100V AC

Current: 1A

Contact Resistance: 40 milliohm max

Dielectric Withstanding Voltage: 100V AC

Insulation Resistance: 100 Megohms min

Mechanical

Mating Force: 35N (3.57kgf)max

Unmating Force: 10N (1.02kgf) ~ 20N(2.04kgf)

Terminal / housing retention force: 4.0N (0.41kgf)min

Durability: 10,000 cycles

Physical

Housing: Liquid Crystal Polymer, UL 94V-0

Contact: Copper Alloy

Shell: Stainless Steel (0.3mm thickness)

Plating:

Contact Area — 0.13 μ m Gold (Au) over 0.76 μ m Pd/Ni

Solder Tail Area — Gold (Au)flash

Underplating — 1.27 μ m (50 ϕ) Nickel (Ni) min

Coplanarity = 0.08mm max

Operating Temperature: -20°C to +85°C

MARKETS AND APPLICATIONS



**0.65mm (.025") Pitch
Micro-USB**

Markets and Applications

- **Mobile Phones**
- **Portable devices**
 - MP3 players
 - Portable digital video players
 - Digital Still Cameras

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ORDERING INFORMATION

Description	Order No.
Micro-USB 'B' receptacle, standard mount	47346 -0001
Micro-USB 'B' receptacle, mid mount	47491 -0001



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