

Connection Systems

I/O Systems

Mini USB Connectors

Description:

Board mount I/O connectors for the industry standard USB (Universal Serial Bus) interface used to connect high speed peripheral devices to computers. Mini USBs are ideal for applications that require small, light-weight connectors.

Typical Applications:

- Desktop and notebook computers
- PDAs, cell phones
- Portable music recorders/players
- Digital cameras
- External disk drives



Benefits/Features:

Industry Standard Meets the speed requirements of USB 2.0.

Meets preliminary requirements of USB OTG (On-The-Go).

Flexible System SMT and through hole mounting styles are available.

Allows for hot plugging of multiple devices.

Ruggedness and Reliability Full metal shields help protect contacts from physical and ESD (Electro Static Discharge) damage.

High cycle life versions are available.

Selectable Features:

Product Type	Mini-B USB receptacles
Total No. of Positions	5
Centerline Spacing	0.8 mm [.0315 in.]
Orientation	Horizontal
Mounting Style	DIP or SMT
Operating Voltage	30 VAC RMS
PCB Thickness	SMT: N/A TH: 0.8 mm [.0315 in.]
Contact Style	Formed
Contact Area Plating	Gold-plated (see product print for thickness)
Height Above Board	4 mm [.16 in.]
Shell (Shield) Material	Brass
Housing Color	Black

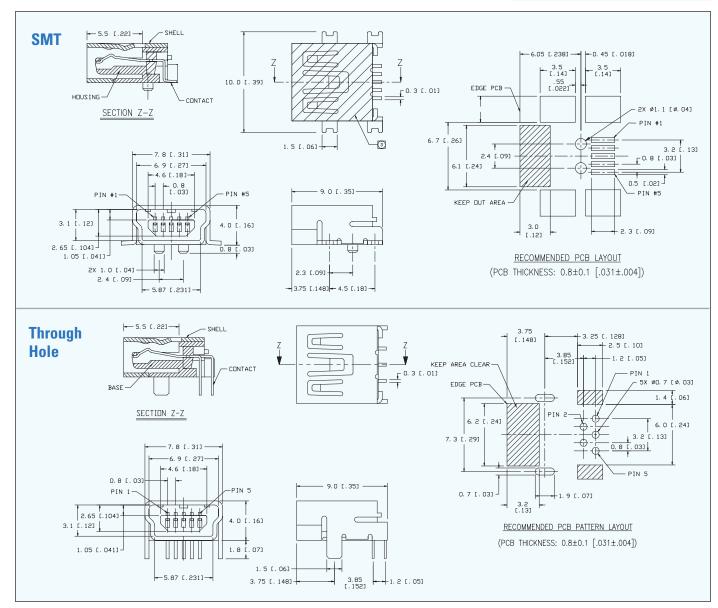
Other Properties:

Packaging Type	SMT: tape and reel, Through hole: tray
Housing Material	Nylon GF
Applicable Soldering Process	IR, vapor phase, wave
Contact Base Material	Phosphor bronze
Insulation Resistance	100 M Ω initial
Withstanding Voltage	100 VAC RMS
Current Rating	1 amp max. per contact
Contact Resistance	30 mΩ
Temperature Range	-25°C to +70°C
Normal Force	30 g min. (controlled by cable connector)
Durability (Mating Cycles)	5000 cycles
Mating Force	35 N [7.9 lbf] max.
Unmating Force	7 N [1.6 lbf] min. initial
Plating (Contact Area)	Gold (thickness varies per Delphi spec.) over nickel underplating
Plating (Soldering End)	2.03 μm [80 μin.] min. tin-lead over nickel underplating
Plating (Shield)	2.03 μm [80 μin.] min. tin-lead over nickel underplating
Underplating	1.27 μm [50 μin.] nickel
Standards	Universal Serial Bus Revision 2.0 specification USB 2.0 Specification ECN #1: Mini-B connector
Approvals and Certification	UL approved

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Ordering Nomenclature 1543 0383 Surface Mount . . . 1543 0383 **Selective Plating:** Through Hole 1543 0384 Gold plated on contact area and 2.54 μm [100

- $\mu\text{in.}]$ min. tin-lead plated on soldering end over
- 1.27 µm [50 µin.] min. nickel underplating
- 1 = Gold Flash
- **2** = 0.381 μm [15 μin.]
- $3 = 0.762 \mu m [30 \mu in.]$



Dimensions are shown in millimeters [inches].

For additional information, please contact us or visit our website.

www.delphi.com/connect

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