

# Micro-USB Connector For Multimedia Device Market

## DESCRIPTION

Extremely small high reliability connectors comply with physical, electrical and environmental requirements of Micro-USB standard (USB 2.0). Space receptacles and plugs are available in a wide variety of mounting and termination configurations, permitting their use in various applications.



## FEATURES & BENEFITS

- ▀ Size reduction
  - Compared with the standard Mini –B connectors, the size is reduced by approximately 60% while still allowing a high-speed data transfer of 480Mbps
- ▀ Receptacle styles
  - Two interface configurations: B and AB type
  - Mid-mount and Reverse mounting styles
- ▀ Plug styles
  - Used for data transmission, earphone or charging applications
- ▀ High durability
  - Fully mated condition is confirmed by a definite tactile sensation
- ▀ RoHS compliant and Halogen free

## TARGET MARKETS & APPLICATIONS

- ▀ Mobile phone
- ▀ PDA
- ▀ Portable music players
- ▀ Digital cameras and other applications requiring high reliability Micro-B interface connectors

# TECHNICAL INFORMATION

## MATERIALS

- Contact : Copper alloy
- Contact area : 30u" Au over nickel
- Solder tail area : Au flash over nickel
- Shield : Stainless steel
  - Pure tin plating: 10104110, 10104111, 10103592, 10103594,
  - Matte tin plating: 10118192, 10118193 and 10118194
  - Nickel plating: 10104109, 10103593
- Housing : LCP for receptacle & PA6T for plug
  - Black color for B-type
  - Gray color for AB-type
- UL94V-0

## ELECTRICAL PERFORMANCES

- Low Level Contact Resistance: Initial 30m Ω Maximum; After  $\Delta R = \pm 10m\Omega$  (Test condition: EIA-364-23)
- Insulation Resistance: Initial 1000MΩ Minimum; After 100MΩ Minimum (Test condition: EIA-364-21)
- Dielectric Withstanding Voltage: 100VAC for 1 minute; No Breakdown (Test condition: EIA-364-20)
- Temperature Rise: 30°C Maximum (Test condition: EIA-364-70)

## APPROVALS AND CERTIFICATIONS

- UL
- USB Committee TID No 60001790 and 60001791

## PACKAGING

- Tape and reel
- Packing specification GS-14-1461, GS-14-1465 and GS-14-1466

## PART UNMBERS

Part Number	Product Description
10103592-0001LF	Micro-USB B Rec. Reverse, DIP
10103593-0001LF	Micro-USB B Rec. STD , Mid-mount
10103594-0001LF	Micro-USB B Rec. STD, SMT+ DIP
10104109-0001LF	Micro-USB B Plug
10104110-0001LF	Micro-USB B Rec. STD, SMT
10104111-0001LF	Micro-USB A/B Rec. STD
10118192-0001LF	Micro-USB B Rec. STD, SMT
10118193-0001LF	Micro-USB B Rec. STD, 2 DIP Legs
10118194-0001LF	Micro-USB B Rec. STD, 4 DIP Legs

## ENVIRONMENTAL

- Functional temperature range:
  - -55°C to + 85°C, under test connectors mated without damage

## MECHANICAL PERFORMANCES

- Mating/Un-mating force (initial)
  - Mating force: 35N maximum
  - Unmating force: 10N minimum
- Durability
  - Contact resistance:  $\Delta R = \pm 10m \Omega$  Maximum
  - Appearance: No breakdown
  - Mating cycles: 10,000 cycles at maximum rated of 200 cycles per hour
- Test condition: EIA-364-09

## SPECIFICATIONS

- GS-12-641 product specification