

MICRO USB 2.0 CONNECTORS

OVERVIEW

Extremely small high reliability connectors comply with physical, electrical and environmental requirements of Micro USB standard (USB 2.0).

Space receptacles are available in a wide variety of mounting and termination configurations, permitting their use in various applications.



FEATURES

- More compact than Mini USB
- Offers standard, mid-mount, and reverse options
- Specified for up to 10,000 insertion cycles
- Replaces the need for adapters and power
- RoHS compliance and Lead-free
- Available in UL94V-0 flammability
- Supports On-The-Go (OTG)
- Full metal shielding

BENEFITS

- Highly suitable for interconnect solutions required by mobile phone makers
- Flexible application in various situations
- Ensures maximum receptacle-to-PCB retention
- Allows convenient recharging and communication
- Meets environmental, health and safety requirements
- High flammability rating
- Better accessibility and convenience for users
- For EMI/ESD protection





TECHNICAL INFORMATION

MATERIALS

- Contact: Copper Alloy
- Contact Area: 30μin. 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: 10103593
- Housing: High temperature thermoplastic resin
 - Black color for B-type
 - Gray color for AB-type
- UL94V-0

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: Initial 30 mΩ max.; after $\Delta R = \pm 10 \text{m}\Omega$ (Test condition: EIA-364-23)
- Insulation Resistance: Initial 1000MΩ min.; after 100MΩ min. (Test condition: EIA-364-21)
- Dielectric Withstanding Voltage: 100V AC for 1 minute; no breakdown (Test condition: EIA-364-20)
- Temperature Rise: 30°C max. (Test condition: EIA-364-70)

ENVIRONMENTAL

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

MECHANICAL PERFORMANCE

- Mating/Un-mating Force (Initial)
- Durability
 - Contact Resistance: $\Delta R = \pm 10 \text{m}\Omega$ max.
 - Appearance: No breakdown
 - Mating Cycles: 10,000 cycles at max. rated of 200 cycles per hour
 - Test Condition: EIA-364-09

SPECIFICATIONS

- GS-12-641 product specification

PACKAGING

- Tape & Reel
- Packing specification GS-14-1461, GS-14-1465 and GS-14-1466

TARGET MARKETS/APPLICATIONS

- Consumer
 - Camcorder
 - Smartphone
 - MP3 Player
 - Bluetooth Headphone
 - Smartwatch
 - Tablet
 - Reader
 - GPS
 - Laptop coolers
- Communication & Industrial
 - Field PC
 - Satellite Phone

PART NUMBERS

Description	Part Numbers
Micro USB 2.0 B Receptacle Reverse, DIP	10103592-0001LF
Micro USB 2.0 B Receptacle STD, Mid-mount	10103593-0001LF
Micro USB 2.0 B Receptacle STD, SMT+ DIP	10103594-0001LF
Micro USB 2.0 B Receptacle STD, SMT	10104110-0001LF
Micro USB 2.0 B Receptacle STD, SMT Micro-USB A/B Receptacle STD	10104111-0001LF
Micro USB 2.0 B Receptacle STD, SMT	10118192-0001LF
Micro USB 2.0 B Receptacle STD, 2 DIP Legs	10118193-0001LF
Micro USB 2.0 B Receptacle STD, 4 DIP Legs	10118194-0001LF

PART NUMBER
10118194-0X0XLF

Item	Title	Q'TY
1	Shell	1
2	Terminal	5
3	InsertMolding	1

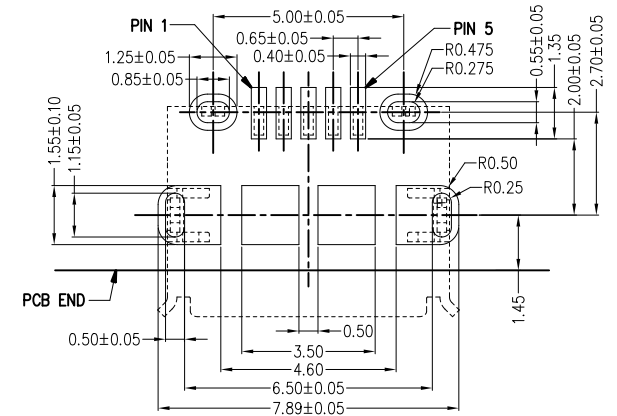
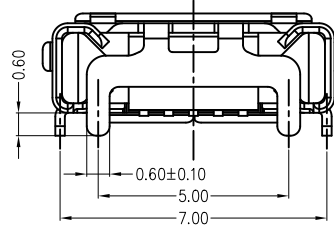
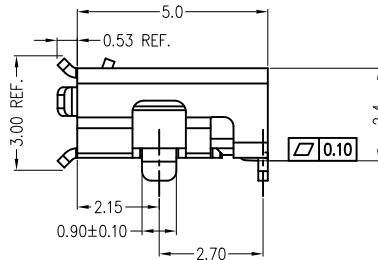
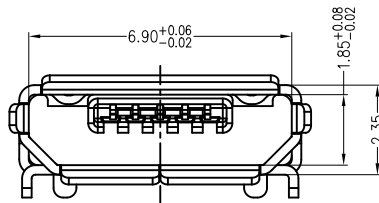
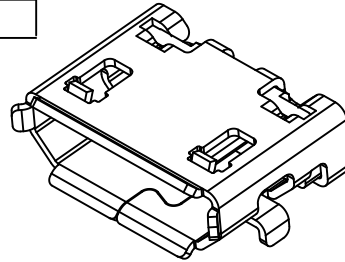
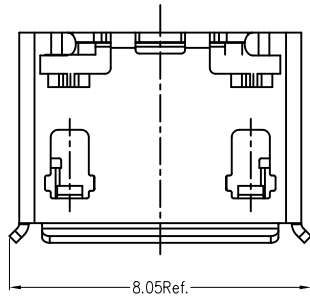
PRODUCT NUMBER DESCRIPTION
10118194- X X X X LF

1-CONTACT AREA: 0.76um AU
2-CONTACT AREA: GOLD FLASH

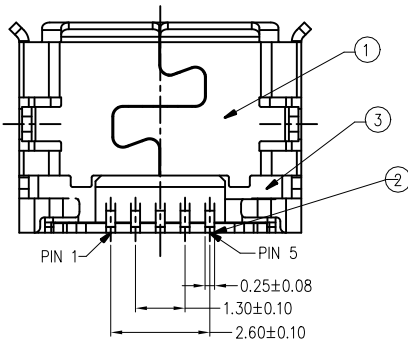
0-WITH FLANGE SEE SHEET 1
1-WITHOUT FLANGE SEE SHEET 2

0-PLASTIC REEL
1-CARDBOARD REEL

0-COLD SEALING
1-HOT SEALING



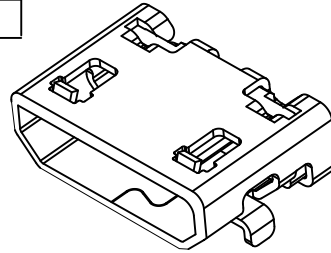
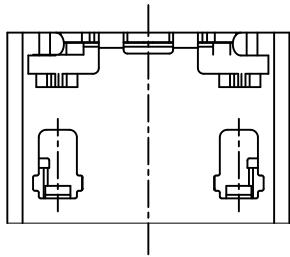
REFERENCE PCB LAYOUT



mat'l. code		surface ASME Y14.5		tolerance ASME Y14.5		projection		product family HPL_511	
ltr	ecn no	dr	date	tolerances unless otherwise specified		MM		title	
A	/	LS	10/21'11	.X±0.38		MM		MICRO USB B TYPE RECEPTACLE	
B	ELX-N-23501	LQ	3/11/16	.XX±0.25		MM		MICRO USB B TYPE RECEPTACLE	
C	ELX-N-25209	LZ	9/29/16	.XXX±0.10		scale 1:1		MICRO USB B TYPE RECEPTACLE	
D	ELX-N-27006	LZ	05/16/17	dr	JASON_HSU	05/21/11	Amphenol FCI	dwg no sheet1 of 2 size	
				engr	JASON_HSU	05/21/11		10118194 A4	
				chr	JASON_HSU	05/21/11		Product Customer Drawing	
				app	GARY_HSIEH	05/21/11			
sheet index	revision	D							
	sheet	1							

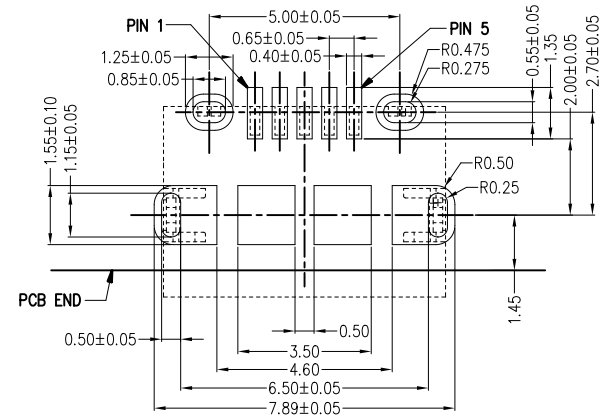
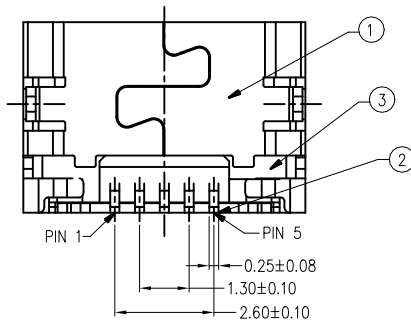
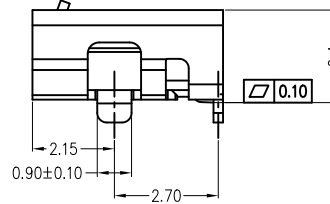
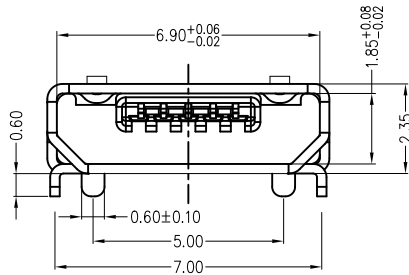
PART NUMBER
10118194-0X1XLF

Item	Title	Q'TY
1	Shell	1
2	Terminal	5
3	InsertMolding	1



NOTES:

- MATERIAL:
HOUSING: HIGH THERMOPLASTIC RESIN, UL94V-0, COLOR: BLACK
TERMINAL: COPPER ALLOY
SHELL: STAINLESS WITH FLANGE OR WITHOUT FLANGE
- FINISH:
CONTACT AREA: SEE PRODUCT NUMBER DESCRIPTION
CONTACT SOLDER AREA: GOLD FLASH
SHELL: MATTE TIN PLATED
- TYPE
UNDER NICKEL PLATED ALL OVER.
- PRODUCT SPECIFICATION: GS-12-641.
- PACKAGING SPECIFICATION: GS-14-2180.
- THE "LF" MEANS FOR LEAD FREE AND CAN WITHSTAND EXPOSE TO 260°C PEAK TEMPERATURE FOR 10 SECONDS IN IR REFLOW PROCESS.



REFERENCE PCB LAYOUT

mat'l. code	surface ASME Y14.5	tolerance ASME Y14.5	projection	product family HPL_511
ltr	ecn no	dr	date	title MICRO USB B TYPE RECEPTACLE
D				dwg no 10118194
				sheet2 of 2
				type Product Customer Drawing
sheet index	revision sheet	D	2	