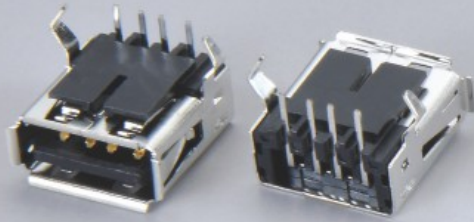


184 SERIES USB P.C.B. RIGHT ANGLE TYPE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic PBT, UL94V-0

SHELL: BRASS

CONTACT: BRASS

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.5A MAX

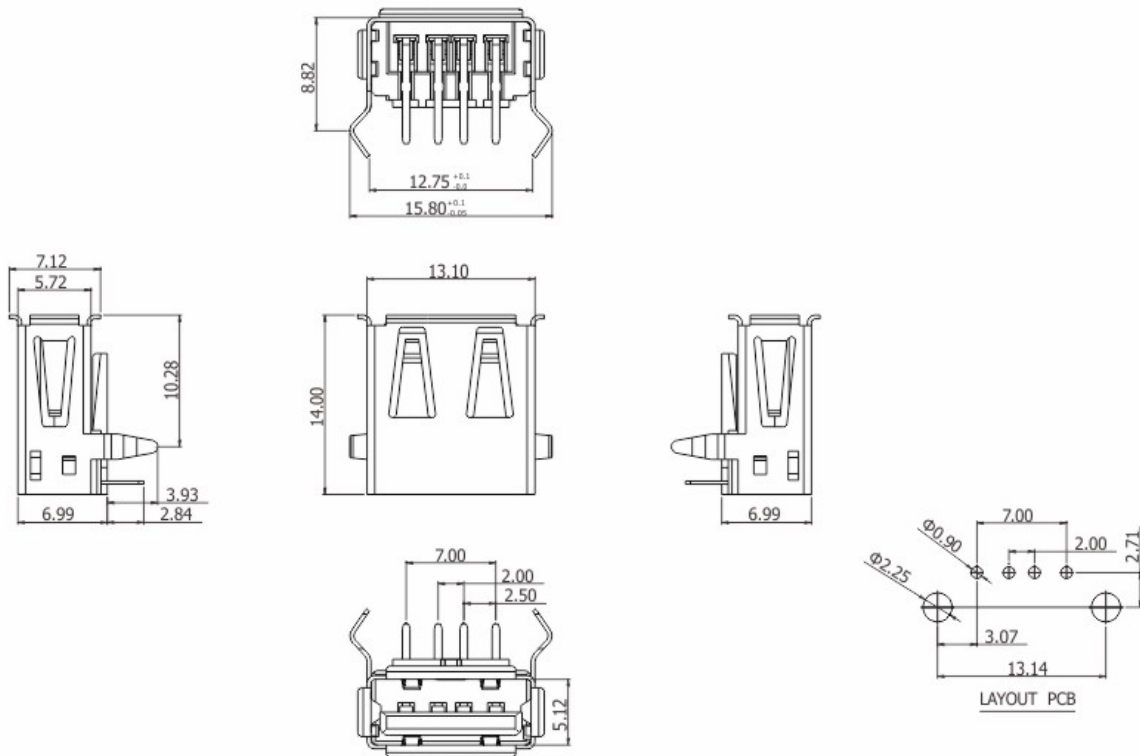
ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

INSULATION RESISTANCE: 1000 MEGOHMS MIN

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

TEMPERATURE RANGE: -40°C ~ +85°C



Ordering Information

184 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female (Standard)

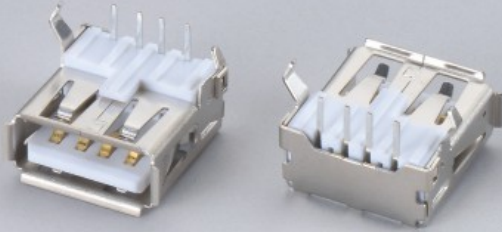
c. Contact Plating
0: Gold flash selective gold
1: 5μ"(0.12um) selective gold over 100μ" nickel
2: 15μ"(0.38um) selective gold over 100μ" nickel
3: 30μ"(0.76um) selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature lcp
4: White

f: Option
3: HOOK TYPE
4: DIP TYPE

USB P.C.B. RIGHT ANGLE TYPE (A TYPE)



NOTE:

1.MATERIAL:

HOUSING: Glass-Filled PBT G/F 30% BLACK

CONTACT: C5191-EH, T=0.25± 0.02

SHELL: C2680, T=0.30± 0.02

2.FINISH:

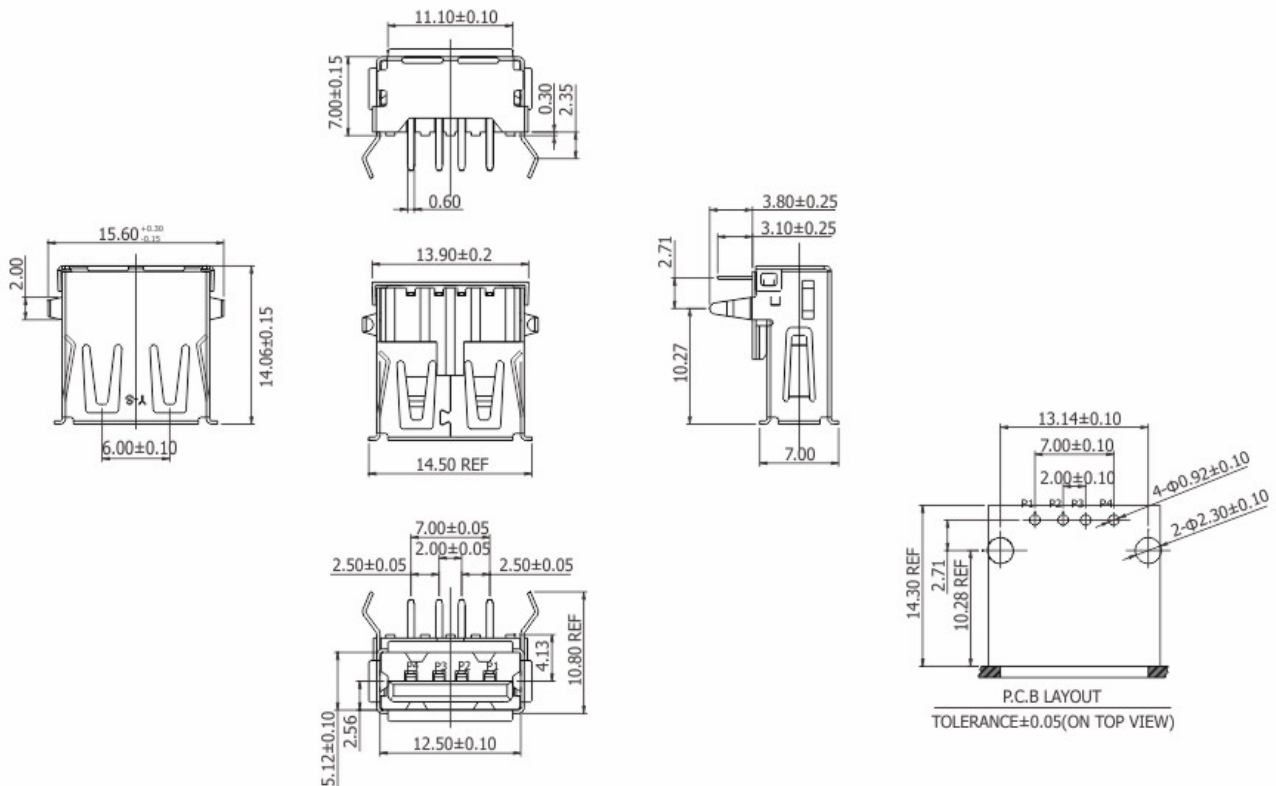
CONTACT: Contact: 1μ" Min Gold over 50μ" Min Nickel

Solder Tail: 120μ" Min Tin over 50μ" Min Nickel

SHELL: 80μ" Nickel over 50μ" min Cu

3.ELECTRICAL

VOTAGE: 30 VAC (R.M.S.)



Ordering Information

184 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2:Female (Standard)

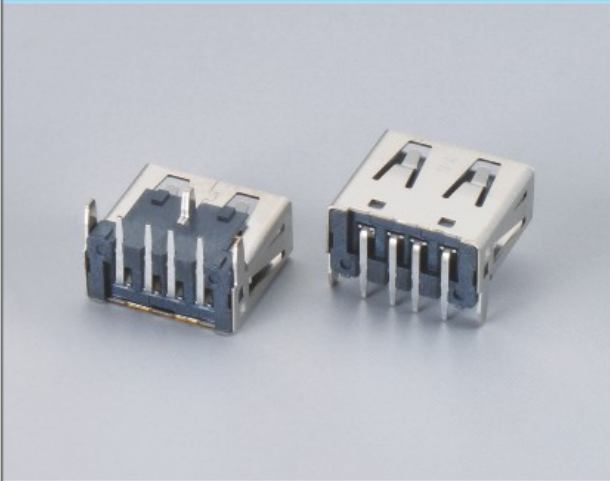
c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold over 50μ" nickel
2: 15μ" selective gold over 100μ" nickel
3: 30μ" selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature lcp
4: White

f. Option
3: HOOK TYPE
4: DIP TYPE

184 SERIES USB P.C.B. RIGHT ANGLE TYPE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: GLASS-FILLED THERMOPLASTIC BLACK HIGH TEMPERATURE LCP, UL94V-0 Rated.

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

INSULATION RESISTANCE: 1000 MEGOHMS MIN

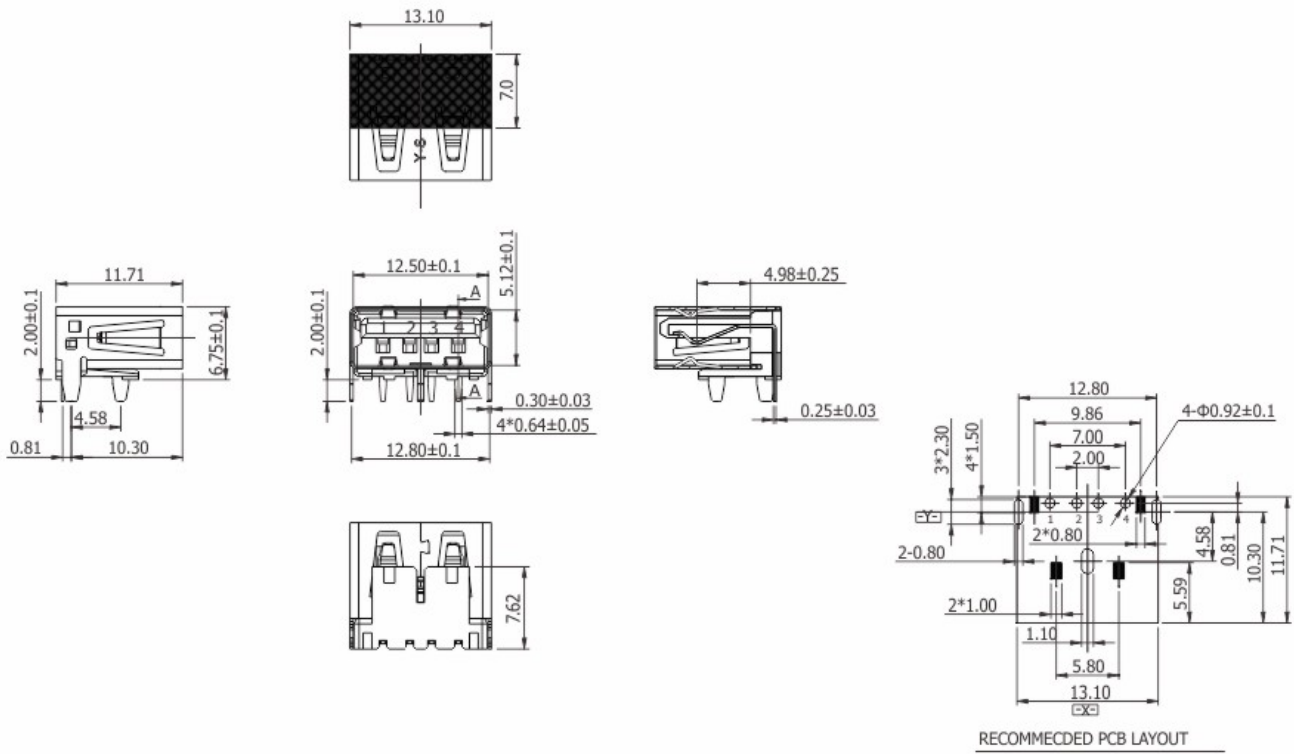
DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

PRODUCT STORAGE & OPERATOR TEMPERATURE

STORAGE TEMPERATURE: -20°C ~ +85°C

OPERATOR TEMPERATURE: -20°C ~ +85°C

:CPK INSPECTION NO. 4 PLACE.



Ordering Information

184 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female (Standard)

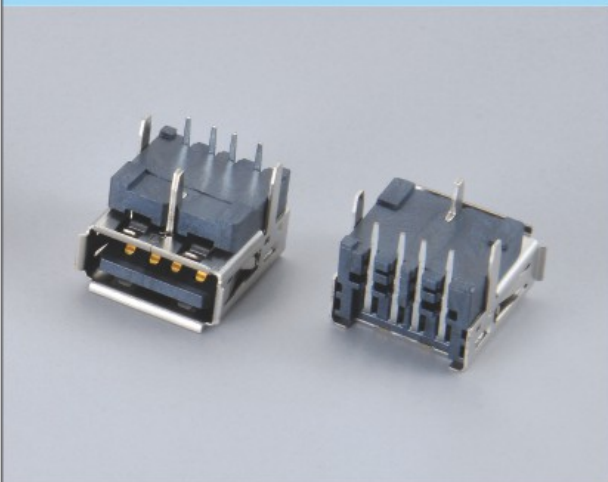
c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold over 50μ" nickel
2: 15μ" selective gold over 50μ" nickel
3: 30μ" selective gold over 50μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature LCP
4: White

f: Option
3: HOOK TYPE
4: DIP TYPE

184 SERIES USB P.C.B. RIGHT ANGLE TYPE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: GLASS-FILLED THERMOPLASTIC BLACK HIGH TEMPERATURE LCP, UL94V-0 Rated.

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

INSULATION RESISTANCE: 1000 MEGOHMS MIN

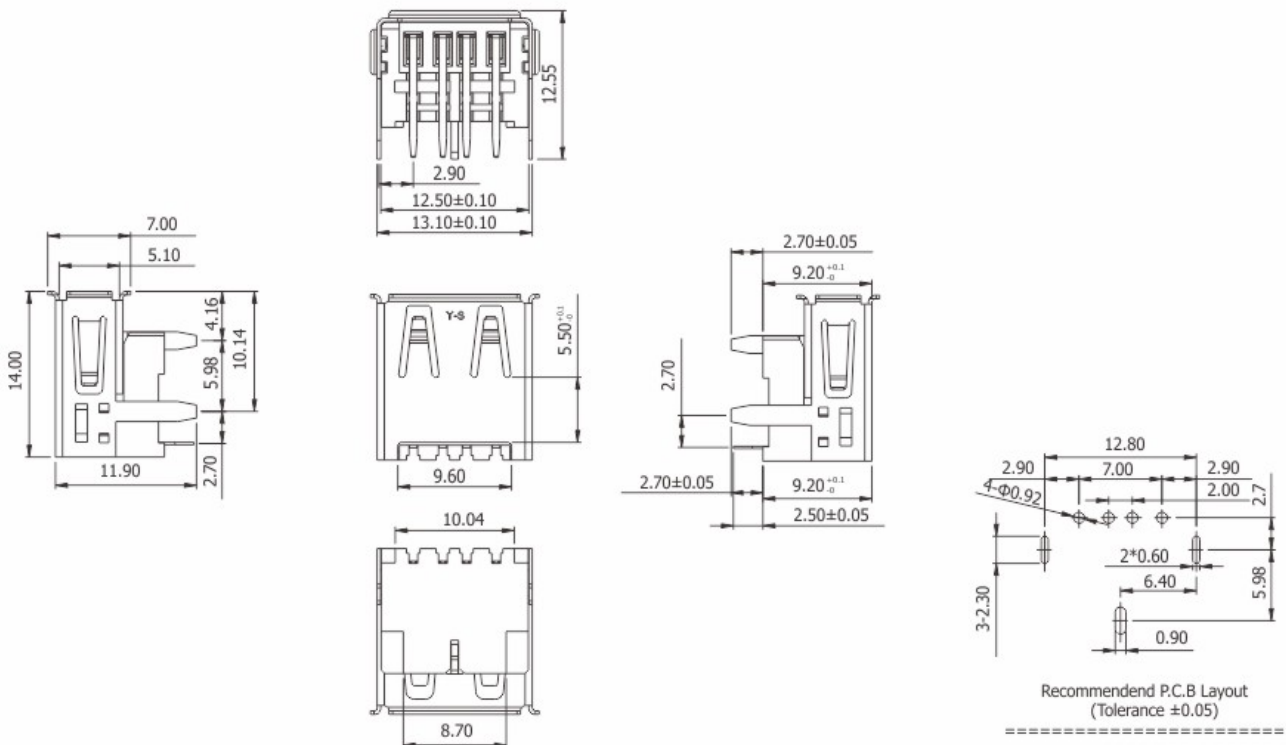
DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

PRODUCT STORAGE & OPERATOR TEMPERATURE

STORAGE TEMPERATURE: -20°C ~ +85°C

OPERATOR TEMPERATURE: -20°C ~ +85°C

:CPK INSPECTION NO. 4 PLACE.



Ordering Information

184 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female (Standard)

c. Contact Plating
0: Gold flash selective gold
1: 5μ"(0.12um) selective gold over 100μ" nickel
2: 15μ"(0.38um) selective gold over 100μ" nickel
3: 30μ"(0.76um) selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature(LCP)
4: White

f: option
3: HOOK TYPE
4: DIP TYPE

184a SERIES USB P.C.B. 180° TYPE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic PBT, UL94V-0

SHELL: BRASS

CONTACT: BRASS

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

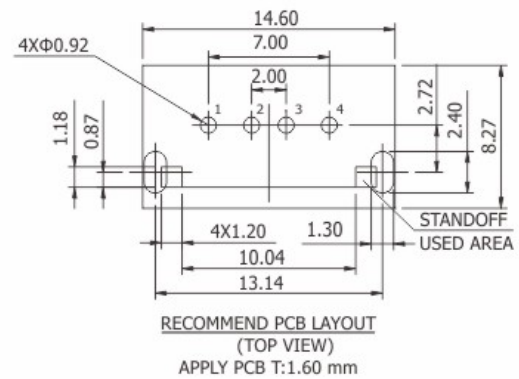
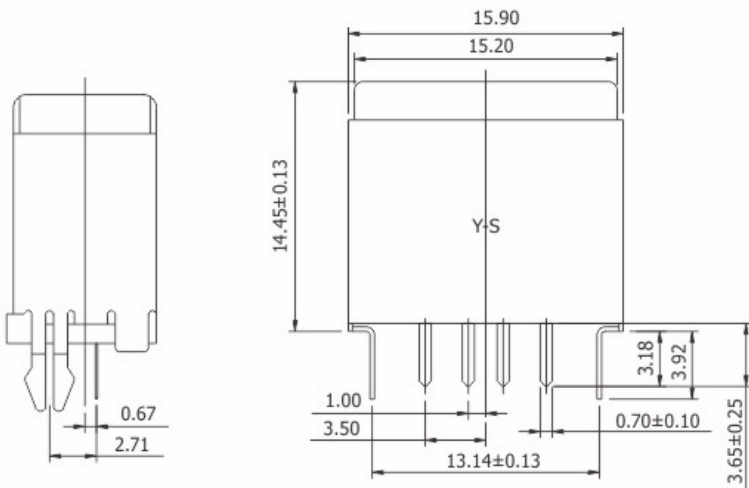
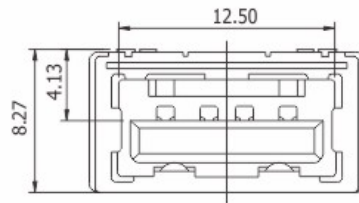
ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

INSULATION RESISTANCE: 1000 MEGOHMS MIN

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

TEMPERATURE RANGE: -40°C ~ +85°C



Ordering Information

184a - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

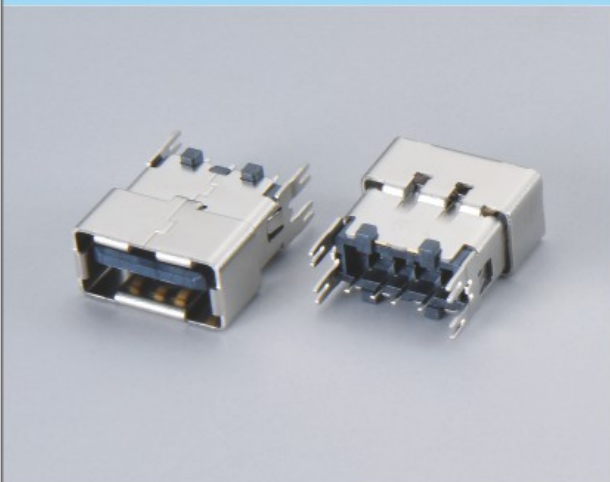
b. Contact Type
4: Female (6: Female (4 Prong)2 Prong)

c. Contact Plating
0: Gold flash selective gold
1: 1μ" selective gold over 5μ" pd over 100μ" nickel
2: 1μ" selective gold over 15μ" pd over 100μ" nickel
3: 1μ" selective gold over 30μ" pd over 100μ" nickel
4: 1μ" selective gold over 50μ" pd over 100μ" nickel

d. Shell Plating
1: Nickel
2: Tin

e. Insulator Color
1: Black
2: Beige
3: Black high temperature
4: White

184a SERIES USB P.C.B. 180° TYPE (A TYPE)

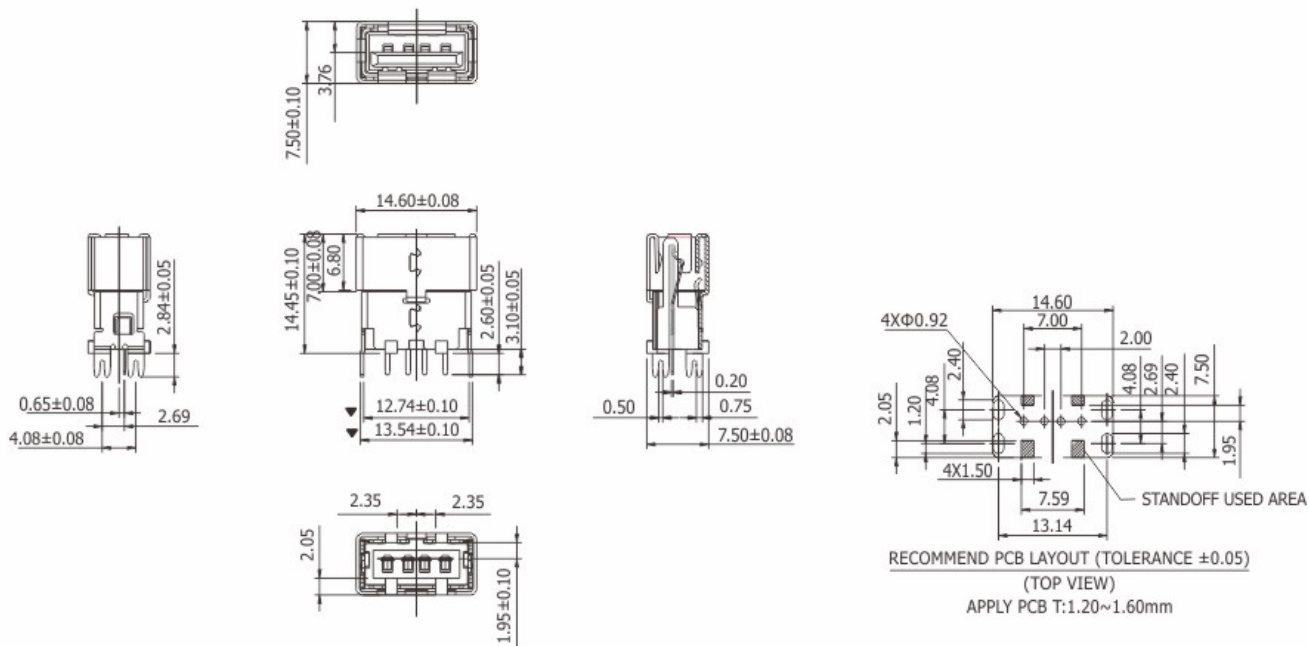


PRODUCT SPECIFICATION

Material:
 PLASTIC: Glass-Filled Thermoplastic LCP, UL94V-0 Rated
 SHELL: BRASS, 80µ" Nickel over 50µ" min Cu
 CONTACT: Phosphor Bronze, Contact Plating: 2µ" selective gold over 30µ" pd over 100µ" nickel min.
 Solder Tail: 150µ"min Tin over 100µ" Nickel min.
 VOLTAGE RATING: 30V AC (rms)
 CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 milliohms max
 INSULATION RESISTANCE: 1000 megohms min
 DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1min
 PRODUCT STORAGE & OPERATOR TEMPERATURE
 STORAGE TEMPERATURE: -20 °C ~ +85°C
 OPERATOR TEMPERATURE: -20 °C ~ +85°C
 :CPK INSPECTION NO. 2 PLACE.



Ordering Information

184a - XX X X X X
 a b c d e

a. No. Of Pins
 04: 04 positions

b. Contact Type
 8: Female (4 Prong NEW)

c. Contact Plating
 0: Gold flash selective gold
 1: 1µ" selective gold over 5µ" pd over 100µ" nickel
 2: 1µ" selective gold over 15µ" pd over 100µ" nickel
 3: 1µ" selective gold over 30µ" pd over 100µ" nickel
 4: 1µ" selective gold over 50µ" pd over 100µ" nickel

d. Shell Plating
 1: Nickel

e. Insulator Color
 1: Black high temperature(LCP)
 2: Beige
 3: Gray high temperature
 4: White

184a SERIES USB P.C.B. 180° TYPE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: GLASS-FILLED THERMOPLASTIC NYLON 66,
UL94V-0 RATED

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE

VOLTAGE RATING: 30V AC (rms)

CURRENT RATING: 1.0A MAX

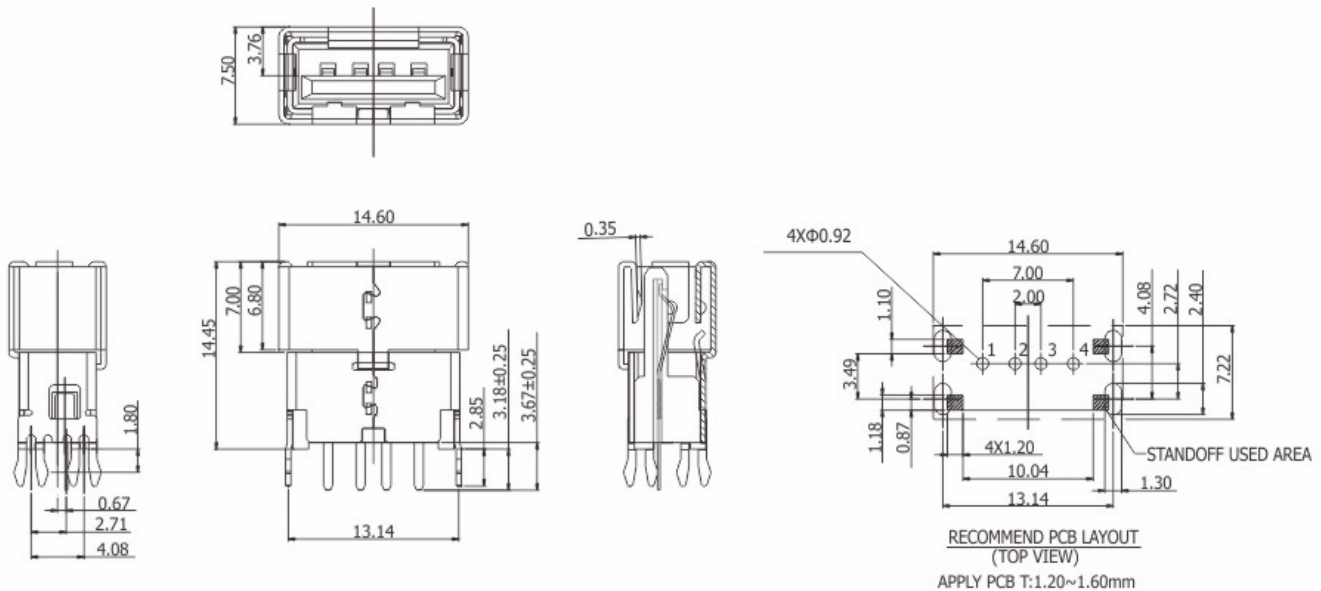
ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 milliohms max

INSULATION RESISTANCE: 1000 megohms min

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1min

TEMPERATURE RANGE: -40°C ~ +85°C



Ordering Information

184a - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

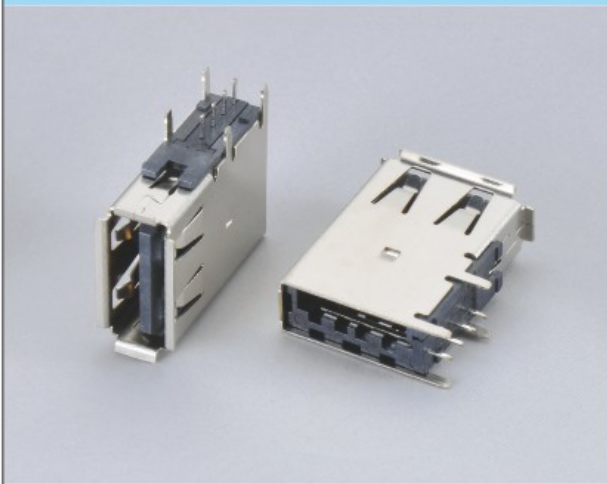
b. Contact Type
8: Female (4 Prong NEW)

c. Contact Plating
0: Gold flash selective gold
1: 1μ" selective gold over 5μ" pd over 100μ" nickel
2: 1μ" selective gold over 15μ" pd over 100μ" nickel
3: 1μ" selective gold over 30μ" pd over 100μ" nickel
4: 1μ" selective gold over 50μ" pd over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black high temperature(LCP)
2: Beige
3: Gray high temperature
4: White

USB UPRIGHT R/A DIP TYPE



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic LCP, UL94V-0 Rated

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE, 2 μ " selective gold over 30 μ " pd over 100 μ " nickel min.

Solder Tail: 150 μ "min Tin over 100 μ " Nickel min.

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

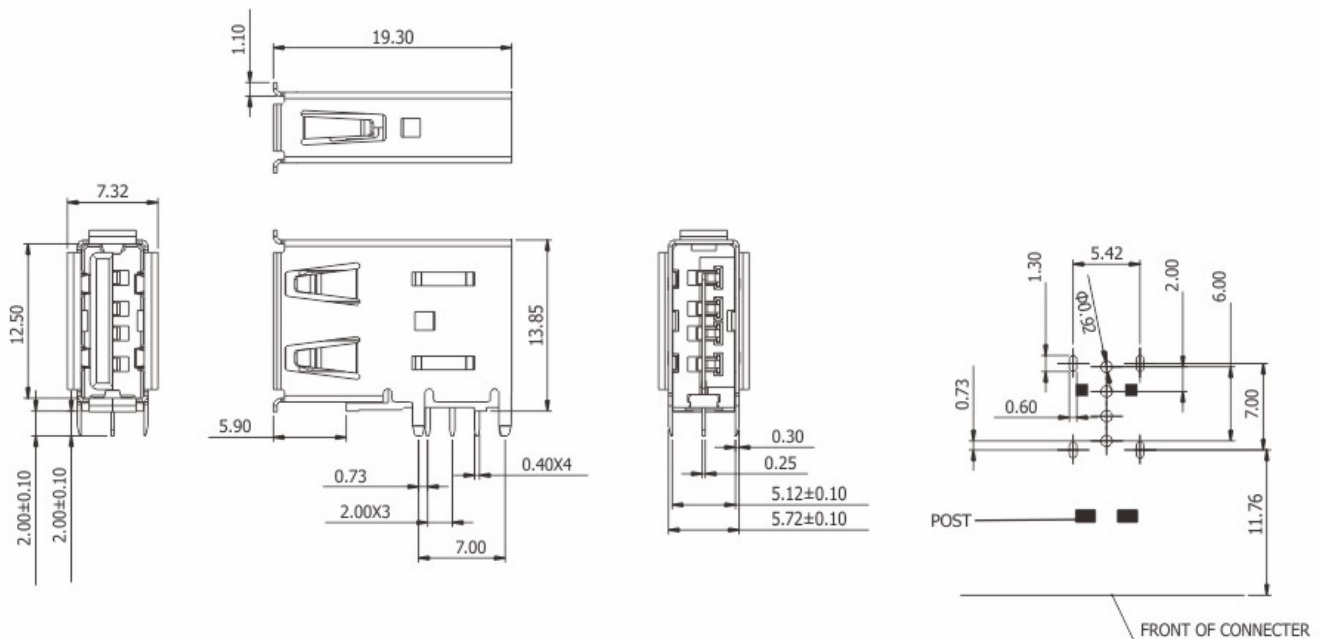
CONTACT RESISTANCE: 30 MILLIOHMS MAX

INSULATION RESISTANCE: 1000 MEGOHMS MIN

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

Operation Temperature: -20°C ~ +85°C

Storage Temperature: -20°C ~ +85°C



Ordering Information

184b - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female (Standard)

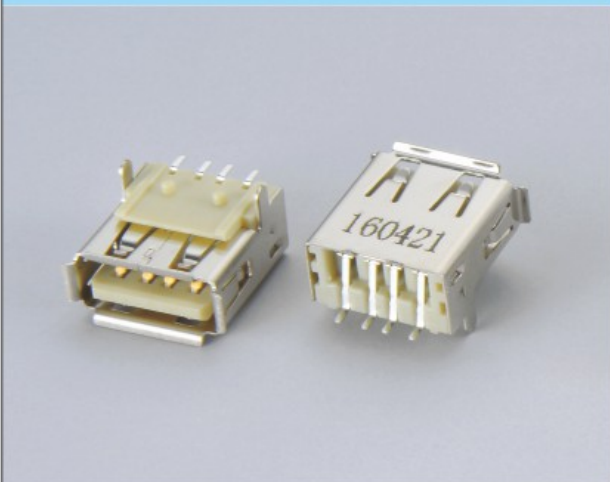
c. Contact Plating
0: Gold flash selective gold
1: 5 μ " selective gold over 50 μ " nickel
2: 15 μ " selective gold over 50 μ " nickel
3: 30 μ " selective gold over 50 μ " nickel
4: 2 μ " selective gold over 30 μ " pd over 100 μ " nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature(LCP)
4: White

f. TYPE:
1.HOOK TYPE
2.DIP TYPE

184e SERIES USB RIGHT ANGLE SMT LOW PROFILE (A TYPE)



Material

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic NYLON 9T, UL94V-0 Rated

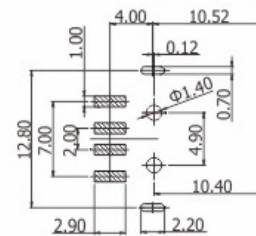
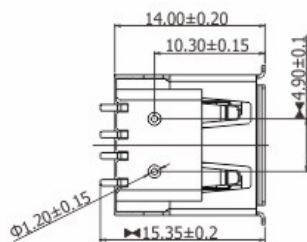
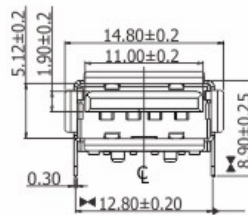
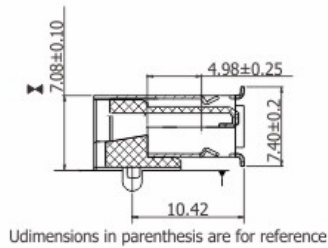
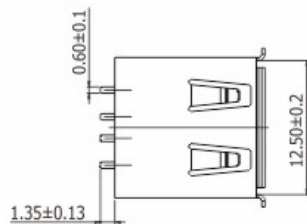
Color: WHITE (RAL 9010)

SHELL: K7, T=0.3mm

CONTACT: BRASS, T=0.25mm plating 30μAu on contact

Specification

- 1.Voltage and current rating: 2 A at 250V AC min
- 2.Dielectric withstanding voltage: 500 V AC/1 minute without breakdown
- 3.Contact resistance: 30m ohms max
- 4.Insulation resistance: 1000M ohms min
- 5.Insertion force: 35 Newtons max
- 6.Extraction force: 10 Newtons min
- 7.Durability: 5000 cycles
- 8.Solderability: Terminal shall be immersed in flux before test, then dip in molten solder for 5±0.5sec at 245±5°C
- 9.CPK INSPECTION NO. 7 PLACE.



Ordering Information

184e - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female

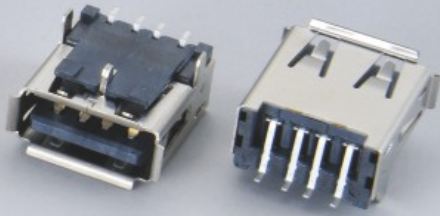
c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold over 100μ" nickel
2: 15μ" selective gold over 100μ" nickel
3: 30μ" selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature
4: White

f. TYPE
1. SMT TYPE

184e SERIES USB RIGHT ANGLE SMT LOW PROFILE (A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic LCP, UL94V-0 Rated

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

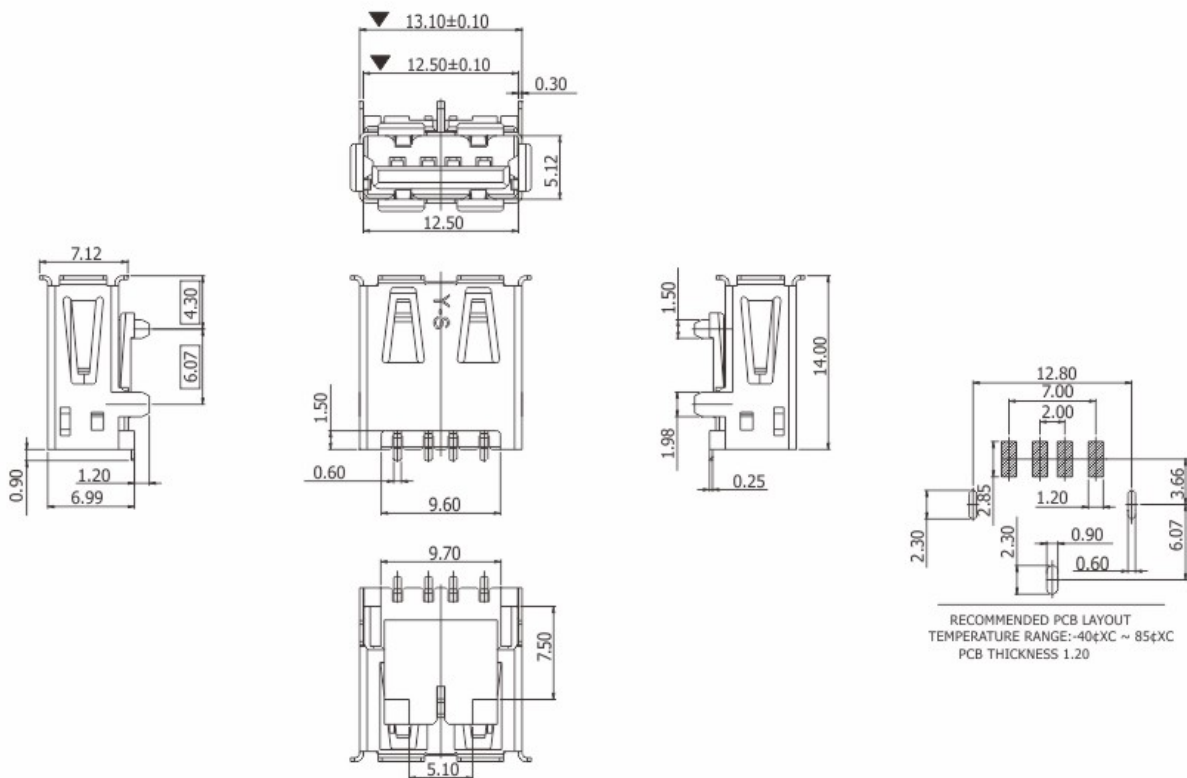
INSULATION RESISTANCE: 1000 MEGOHMS MIN

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

PRODUCT STORAGE & OPERATOR TEMPERATURE

STORAGE TEMPERATURE: -20°C ~ +85°C

OPERATOR TEMPERATURE: -20°C ~ +85°C



Ordering Information

184e - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

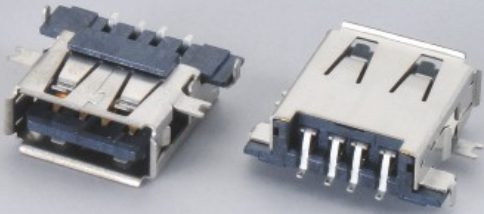
b. Contact Type
4: Female(3 Point)

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold over 100μ" nickel
2: 15μ" selective gold over 100μ" nickel
3: 30μ" selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature
4: White

184e SERIES USB RIGHT ANGLE SMT LOW PROFILE(A TYPE)



PRODUCT SPECIFICATION

USB-A ELECTRICAL CHARACTERISTIC

PLASTIC: Glass-Filled Thermoplastic LCP, UL94V-0 Rated

SHELL: BRASS

CONTACT: PHOSPHOR BRONZE

VOLTAGE RATING: 30V AC (RMS)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 MILLIOHMS MAX

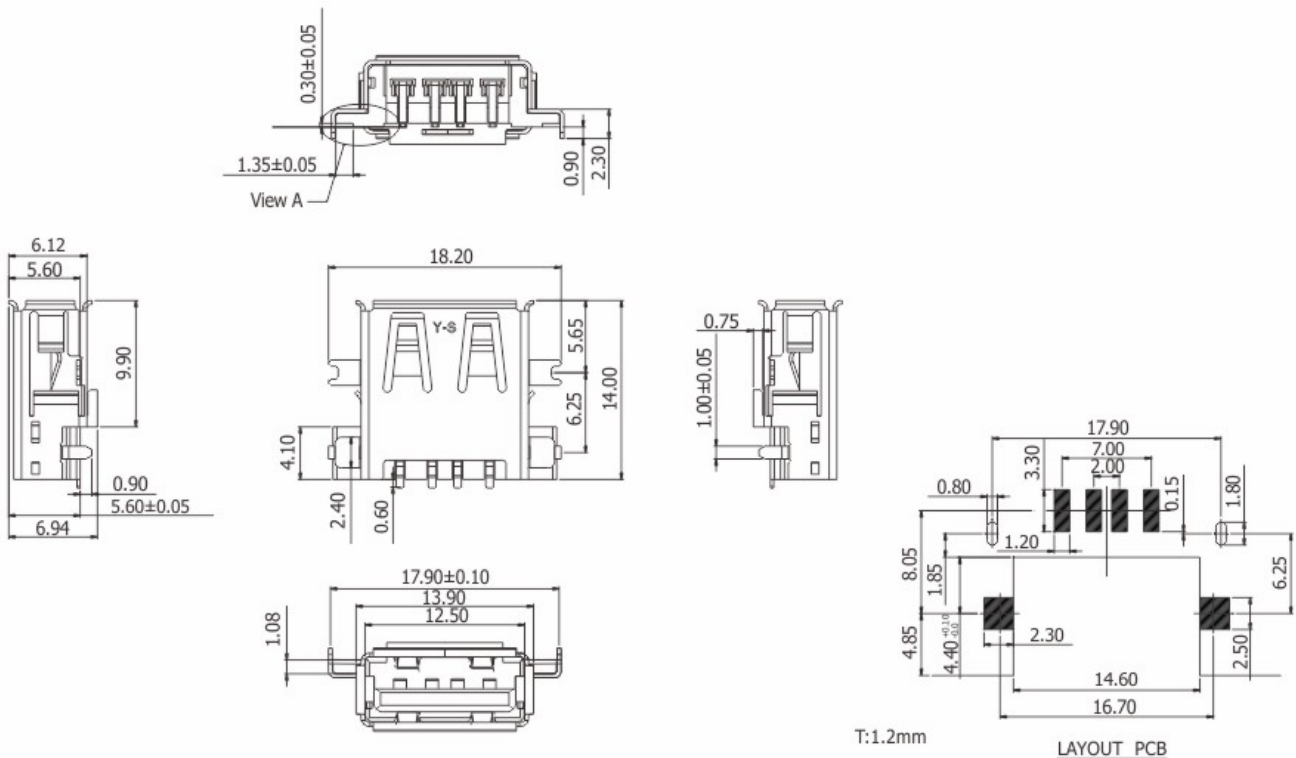
INSULATION RESISTANCE: 1000 MEGOHMS MIN

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN

PRODUCT STORAGE & OPERATOR TEMPERATURE

STORAGE TEMPERATURE: -20°C ~ +85°C

OPERATOR TEMPERATURE: -20°C ~ +85°C



Ordering Information

184e - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

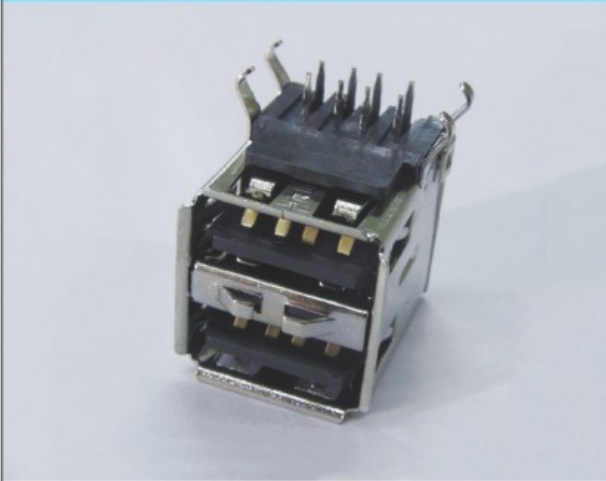
b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold over 100μ" nickel
2: 15μ" selective gold over 100μ" nickel
3: 30μ" selective gold over 100μ" nickel

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: Black high temperature(LCP)
4: White

USB 2.0 STACK TYPE (A TYPE)



NOTE:

1.MATERIAL:

HOUSING: Glass-Filled PBT BLACK

LONG CONTACT: C5191, T=0.2;

5±0.02 SHORT CONTACT:

C5191,T=0.25±0.02

MIDDLE SHELL: C5191, T=0.3; 0±0.02

FRONT SHELL: C2680, T=0.35±0.02

BACK SHELL: C2680, T=0.35±0.02

2.FINISH:

CONTACT: 30µ"gold over 50µ"Nickel MIN.

Soldertails: 120µ'BRIGHT TIN 50µ"MIN.

Nickel UNDERPLATING OVER ALL

FRONT SHELL: 150µ" MIN BRIGHT TIN

over 100µ"min Nickel

MIDDLE SHELL: 80µ"Nickel over

50µ"Cu min

BACK SHELL: 150µ"MIN BRIGHT TIN over 100µ"min Nickel

3.ELECTRICAL

VOTAGE: 250 VAC (R.M.S.)

CURRENT: 1.5 AMPERE MAXIMUM PER INSULATION RESISTANCE: 1000

MEGAOHMS MIN

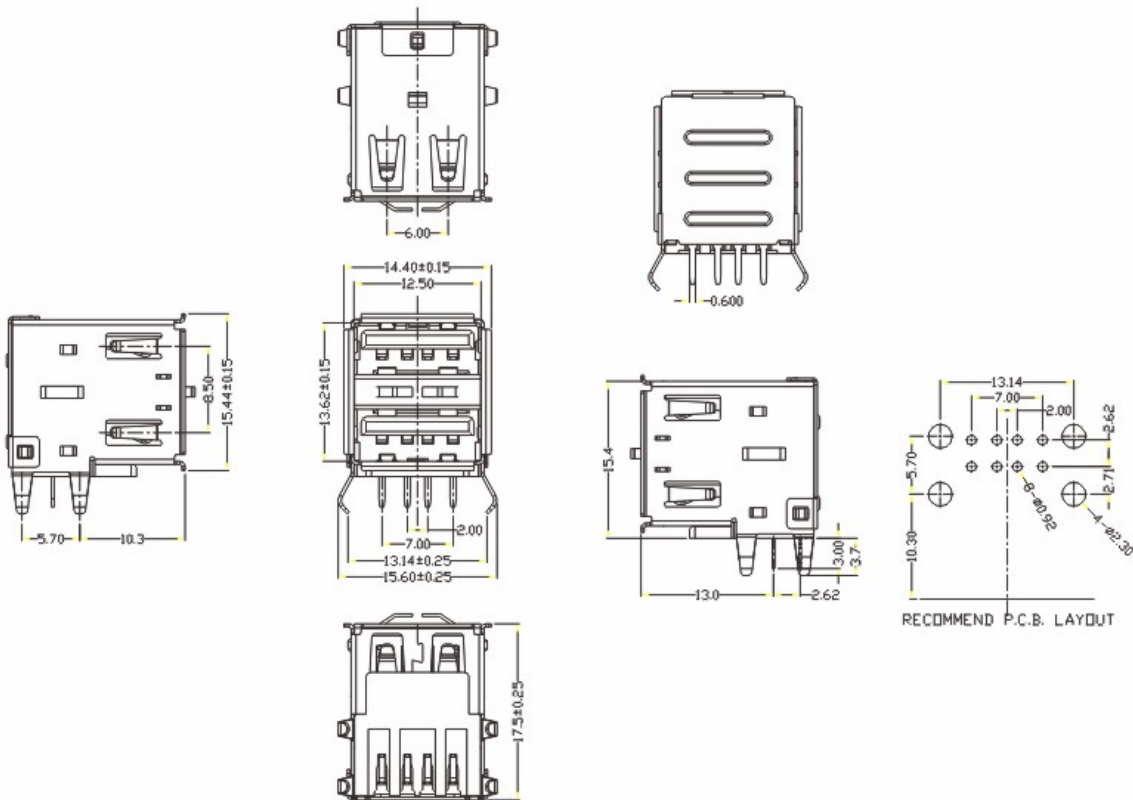
CONTACT RESISTANCE: 30 MILLIOHMS MAXIMUM INITIAL

DIELECTRIC WITHSTANDING VOLTAGE: 500 VAC AT SEE LEVEL

4.PRODUCT STORAGE & OPERATOR TEMPERATURE

STORAGE TEMPERATURE: -20°C~+85°

OPERATOR TEMPERATURE: -20°C~+85°



Ordering Information

185 - XX X X X X X
a b c d e f

a. No. Of Pins
08: 08 positions

b. Contact Type
2: Female (Standard)

c. Contact Plating
0: Gold flash selective gold
1: 5µ" selective gold over 50µ" nickel
2: 15µ" selective gold over 50µ" nickel
3: 30µ" selective gold over 50µ" nickel

d. Shell Plating
1: Nickel
2: Tin

e. Insulator Color
1: Black
2: Beige
3: White

f. Option
3: HOOK TYPE
4: DIP TYPE

USB 2.0 STACK R/A TYPE



NOTE:

1.MATERIAL:

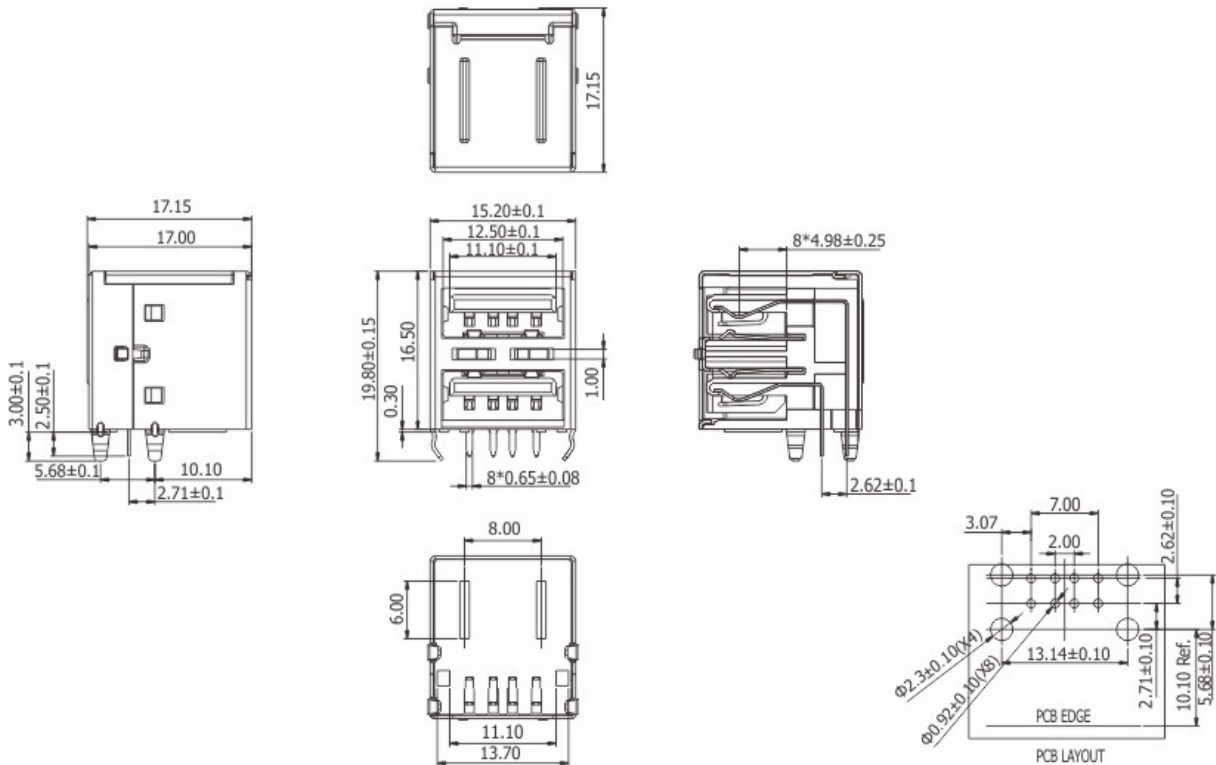
HOUSING: Glass-Filled PBT G/F
 30% BLACK
 LONG CONTACT: C5191,
 $T=0.25\pm0.02$ SHORT CONTACT:
 C5191, $T=0.25\pm0.02$
 MIDDLE SHELL: C5191,
 $T=0.30\pm0.02$ FRONT SHELL:
 C2680, $T=0.35\pm0.02$
 BACK SHELL: C2680, $T=0.35\pm0.02$

2.FINISH:

CONTACT: $30\mu\text{m}$ gold over $50\mu\text{m}$
 Nickel MIN.
 Solderetails: $120\mu\text{m}$ BRIGHT TIN $50\mu\text{m}$
 " MIN. Nickel UNDERPLATING OVER

ALL

FRONT SHELL: $150\mu\text{m}$ MIN BRIGHT
 TIN OVER $100\mu\text{m}$ min NICKEL
 MIDDLE SHELL: $80\mu\text{m}$ Nickel over
 $50\mu\text{m}$ Cu min
 BACK SHELL: $150\mu\text{m}$ MIN BRIGHT
 TIN OVER $100\mu\text{m}$ min NICKEL
 3.ELECTRICAL
 VOTAGE : 30 VAC (R.M.S.)
 4.PRODUCT STORAGE & OPERATOR
 TEMPERATURE
 STORAGE TEMPERATURE: $-20^{\circ}\text{C} \sim$
 $+85^{\circ}\text{C}$
 OPERATOR TEMPERATURE: -20
 $^{\circ}\text{C} \sim +85^{\circ}\text{C}$



Ordering Information

185 - XX X X X X X
 a b c d e f

a. No. Of Pins
 08: 08 positions

b. Contact Type
 3: Female (Full wrap type)

c. Contact Plating
 0: Gold flash selective gold
 1: $5\mu\text{m}$ selective gold over $50\mu\text{m}$ nickel
 2: $15\mu\text{m}$ selective gold over $50\mu\text{m}$ nickel
 3: $2\mu\text{m}$ selective gold over $30\mu\text{m}$ pd over $100\mu\text{m}$ nicke
 5: $30\mu\text{m}$ selective gold over $50\mu\text{m}$ nickel

d. Shell Plating
 1: Nickel

e. Insulator Color
 1: Black
 2: Beige
 3: White
 4: Black high temperature(LCP)

f. Option
 3: HOOK TYPE
 4: DIP TYPE

186 SERIES USB P.C.B. RIGHT ANGLE TYPE (B TYPE)



Product Specification

1. Material:

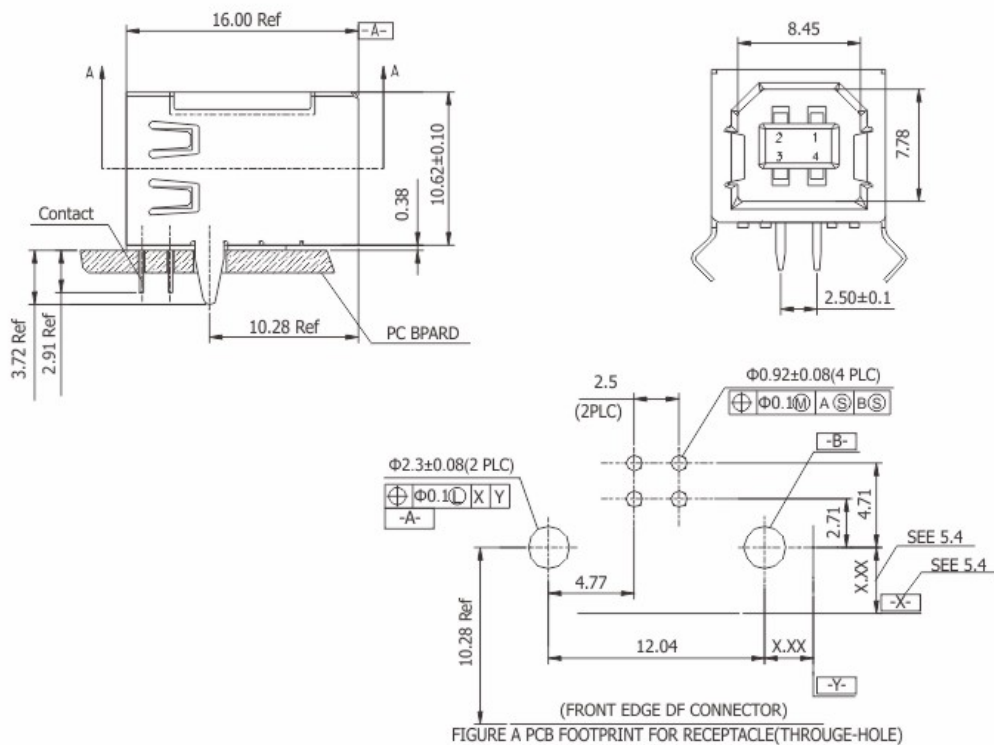
- 1.1 Insulator: Glass-Filled Thermoplastic PBT, UL94V-0 rated
- 1.2 Contact: Copper Alloy
- 1.3 Shell: Copper Alloy

2. RATING:

- VOLTAGE RATING: 30V AC (rms)
- CURRENT RATING: 1.0A MAX
- ELECTRICAL CHARACTERISTICS:
- CONTACT RESISTANCE: 30 milliohms max
- INSULATION RESISTANCE: 100 megohms min
- DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1min
- TOTAL MATING FORCE: 3.57 kgf max
- TOTAL UNMATING FORCE: 1.0 kgf min

3. PRODUCT STORAGE & OPERATOR TEMPERATURE

- STORAGE TEMPERATURE: -20°C ~ +85°C
- OPERATOR TEMPERATURE: -20°C ~ +85°C



Ordering Information

186 - XX X X X X X
 a b c d e f

a. No. Of Pins
 04: 04 positions

b. Contact Type
 2: Female (Standard)

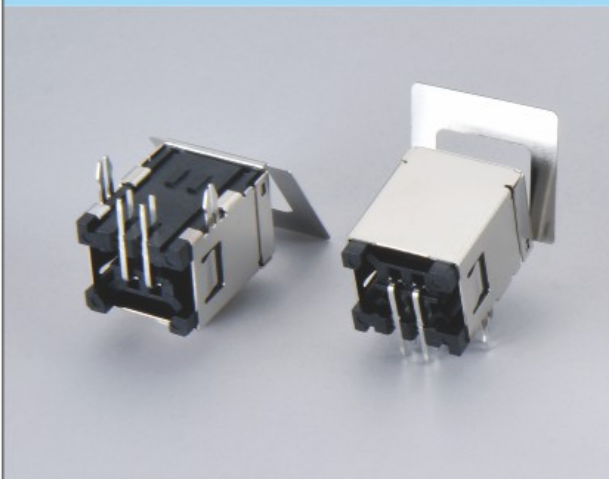
c. Contact Plating
 0: Gold flash selective gold
 1: 5μ" selective gold on contact
 2: 5μ" selective gold on contact
 3: 30μ" selective gold on contact

d. Shell Plating
 1: Nickel
 2: Tin

e. Insulator Color
 1: Black
 2: Beige
 3: White
 4: Black high temperature

f. Option
 3: HOOK TYOE
 4: DIP TYPE

USB 2.0 RIGHT ANGLE TYPE(B TYPE)



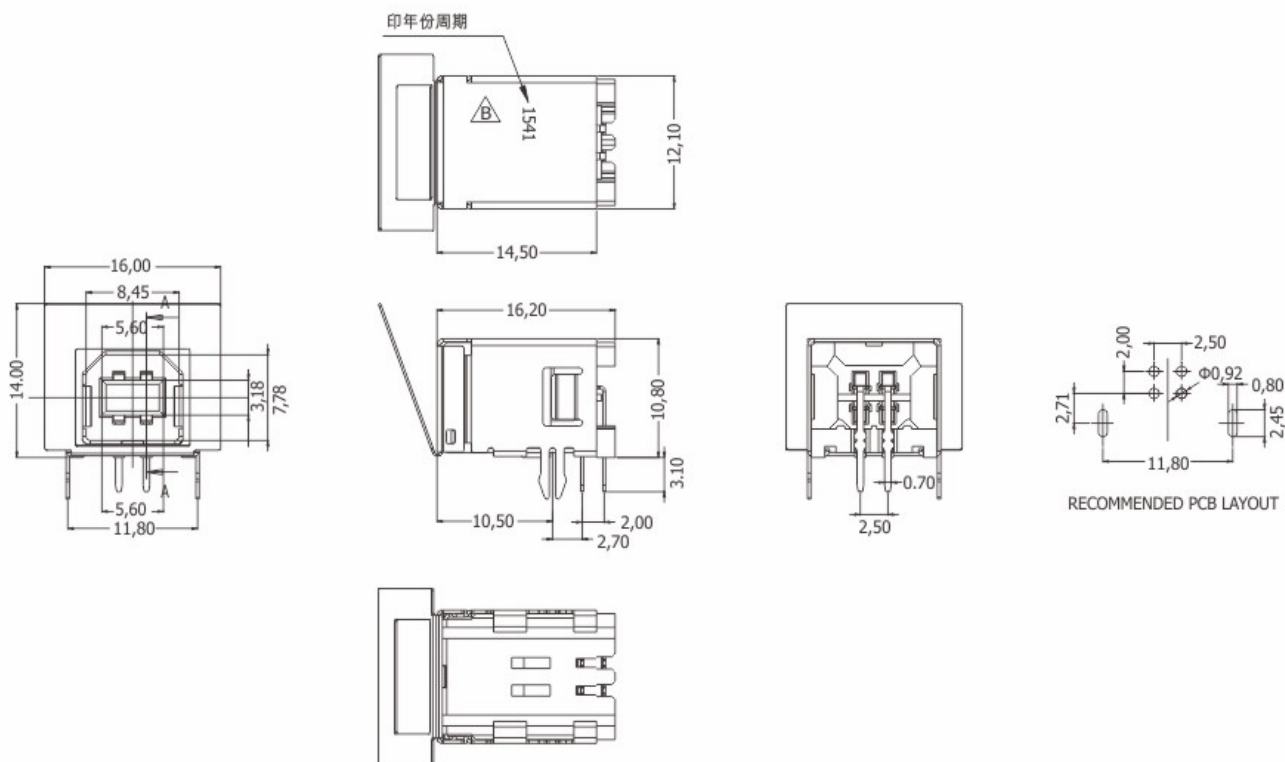
NOTE:

SPECIFICATION:

- 1).Voltage Current Rating: 1.5A, 30VAC(rms)
- 2).Insulation Resistance: 1000MΩ Min.
- 3).Contact Resistance: 30mΩ Max.
- 4).Dielectric Withstanding Voltage: 500V AC

MECHANICAL:

- 1).Mating Force: 3.57Kgf (35N) Max
- 2).Unmating force: 1.02Kgf (10N) Min
- 3).DURABILITY: 1500 Cycles



Ordering Information

186 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold on contact
2: 15μ" selective gold on contact
3: 30μ" selective gold on contact

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: White
4: Black high temperature

f: Option
1: Without rear shell
2: With rear shell
4: Complete-covering type shell

USB 2.0 RIGHT ANGLE TYPE(B TYPE)



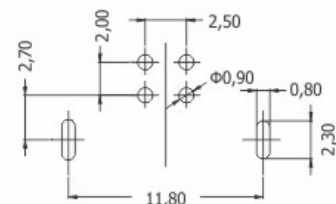
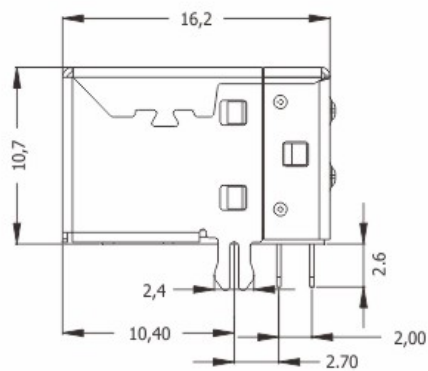
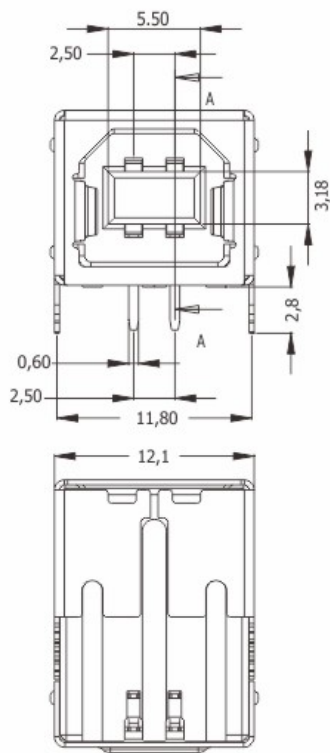
NOTE:

SPECIFICATION:

- 1).Voltage Current Rating: 1.5A, 30VAC(rms)
- 2).Insulation Resistance: 1000MΩ Min.
- 3).Contact Resistance: 30mΩ Max.
- 4).Dielectric Withstanding Voltage: 500V AC

MECHANICAL:

- 1).Mating Force: 3.57Kgf (35N) Max
- 2).Unmating force: 1.02Kgf (10N) Min
- 3).DURABILITY: 1500 Cycles



RECOMMENDED PCB LAYOUT

Ordering Information

186 - XX X X X X X
a b c d e f

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold on contact
2: 15μ" selective gold on contact
3: 30μ" selective gold on contact

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: White
4: Black high temperature

f. Option
1: Without rear shell
2: With rear shell

186b SERIES USB P.C.B. 180° TYPE (B TYPE)



Product Specification

Material:

PLASTIC: Glass-Filled Thermoplastic
LCP, UL94V-0 Rated

CONTACT: PHOSPHOR BRONZE

SHELL: BRASS

RATING:

VOLTAGE RATING: 30V AC (rms)

CURRENT RATING: 1.0A MAX

ELECTRICAL CHARACTERISTICS:

CONTACT RESISTANCE: 30 milliohms max

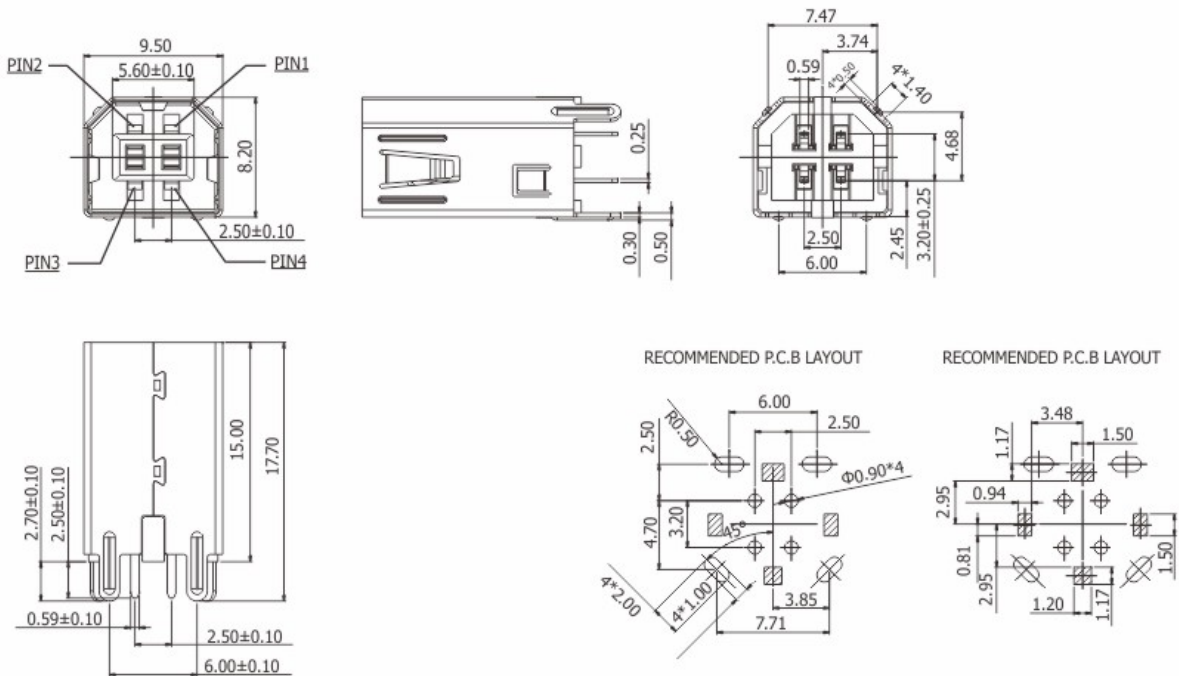
INSULATION RESISTANCE: 1000 megohms min

DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1min

TOTAL MATING FORCE: 3.57 kgf max

TOTAL UNMATING FORCE: 1.02 kgf min

TEMPERATURE RANGE: -40°C ~ +85°C



Ordering Information

184e - XX X X X X
a b c d e

a. No. Of Pins
04: 04 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold on contact
2: 15μ" selective gold on contact
3: 30μ" selective gold on contact

d. Shell Plating
1: Nickel

e. Insulator Color
1: Black
2: Beige
3: White
4: Black high temperature(LCP)

MINI USB TYPE



PRODUCT SPECIFICATION
 USB-A ELECTRICAL
 CHARACTERISTIC
 PLASTIC: BLACK LCP/UL 94-V0 rated.
 Definition of halogen free:
 Bromine (Br) must be under 900 ppm
 Chlorine (Cl) must be under 900 ppm
 Br + Cl must be under 1500 ppm
 SHELL: BRASS

CONTACT: PHOSPHOR BRONZE
 VOLTAGE RATING: 30V AC (RMS)
 CURRENT RATING: 1.0A MAX
 ELECTRICAL CHARACTERISTICS:
 CONTACT RESISTANCE: 30 MILLIOHMS MAX
 INSULATION RESISTANCE: 1000 MEGOHMS MIN
 DIELECTRIC WITHSTANDING VOLTAGE: 500 V DC/1MIN
 TEMPERATURE RANGE: -40°C~85°C

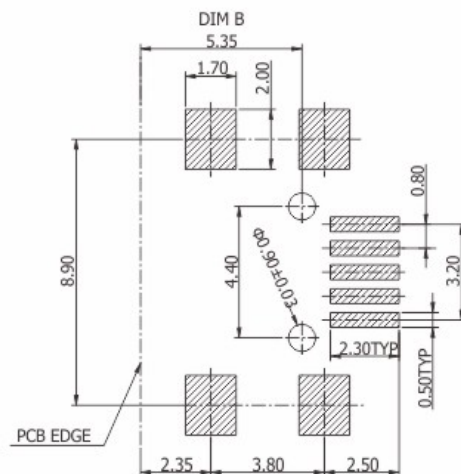
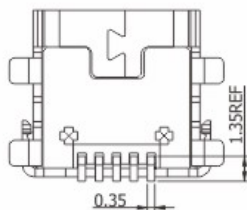
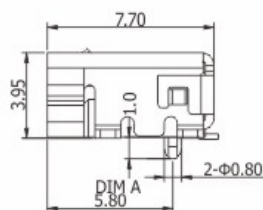
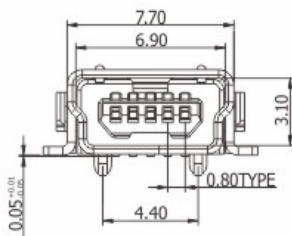
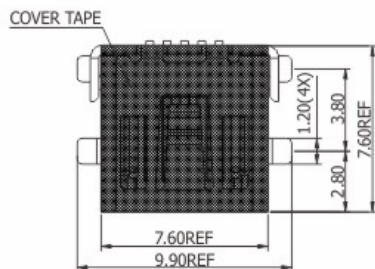


FIGURE A : Printed Circuit Board(PCB) Layout

Ordering Information

186a - XX X X X X X
 a b c d e f

a. No. Of Pins
 05: 05 positions

b. Contact Type
 2: Female

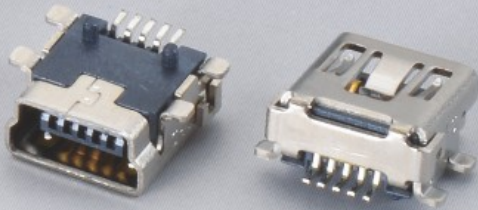
c. Contact Plating
 0: Gold flash selective gold
 1: 5μ" selective gold on contact
 2: 15μ" selective gold on contact
 3: 30μ" selective gold on contact

d. Shell Plating
 1: Nickel
 2: Tin

e. Insulator Color
 1: Black
 2: White
 3: Black high temperature(LCP)

f. Type
 0: Smt B type(Short) 5pin

MINI USB TYPE

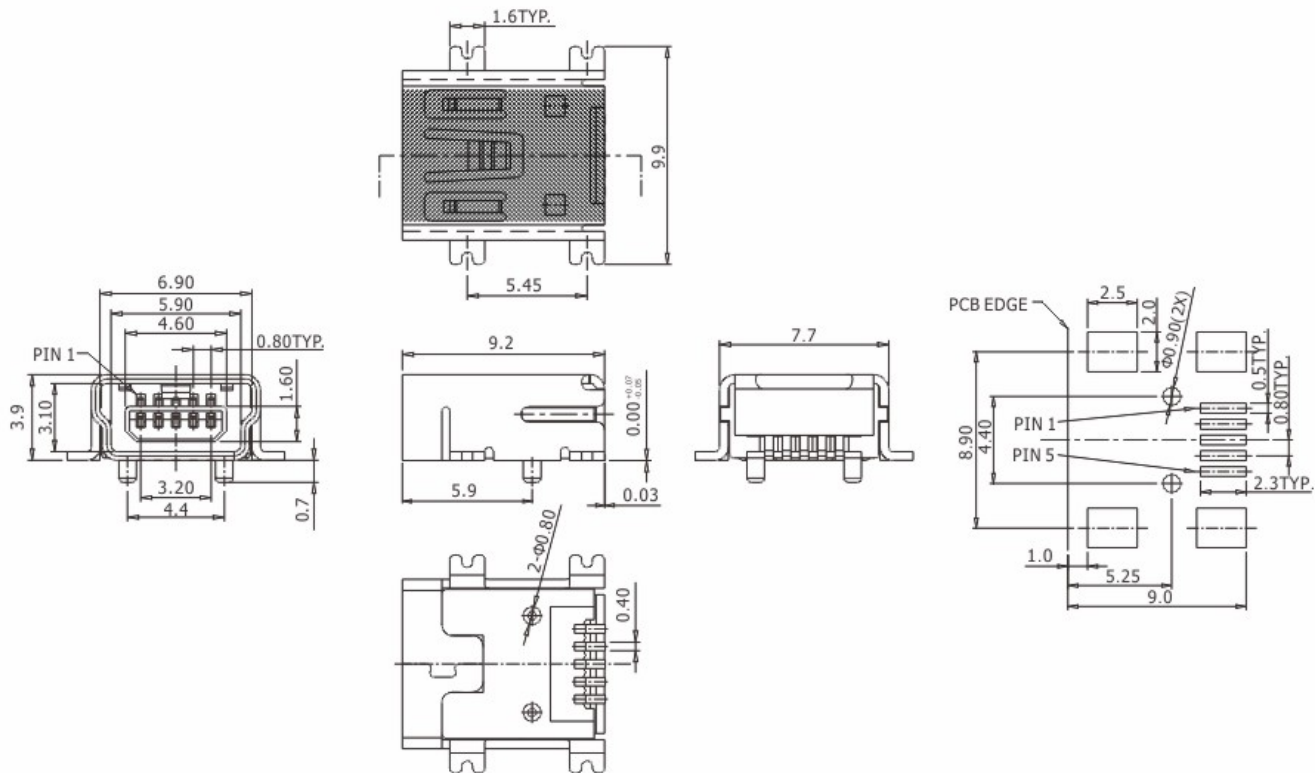


ELECTRICAL CHARACTERISTIC

Contact current rating: 1.0 Amperes.
 Dielectric withstanding Voltage: 100V AC.
 Insulation Resistance: 100Megohms Min.
 Contact Resistance: 50 milliohms Max.
 Operating Temperature: 0°C to +50°C.

MECHANICAL CHARACTERISTICS:

Intervene Force: 35N.Max.
 Separation Force: 7N.Min.
 Singularity Retentivity: 4N.Min.



Ordering Information

186a - XX X X X X X
 a b c d e f

a. No. Of Pins
 05: 05 positions

b. Contact Type
 2: Female

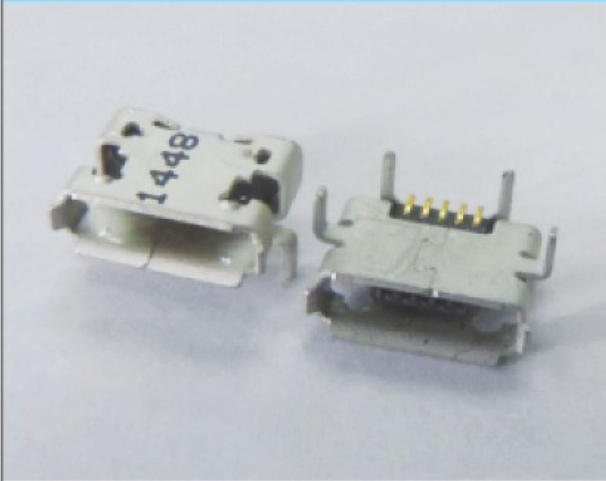
c. Contact Plating
 0: Gold flash selective gold
 1: 5μ" selective gold on contact
 2: 15μ" selective gold on contact
 3: 30μ" selective gold on contact

d. Shell Plating
 1: Nickel
 2: Tin

e. Insulator Color
 1: Black
 2: White
 3: Black high temperature

f: Type
 1: Smt B type 5pin

MICRO USB AB TYPE



Note:

1.MATERIAL:

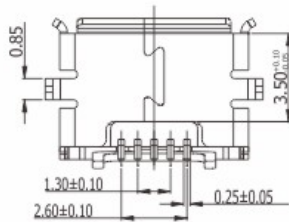
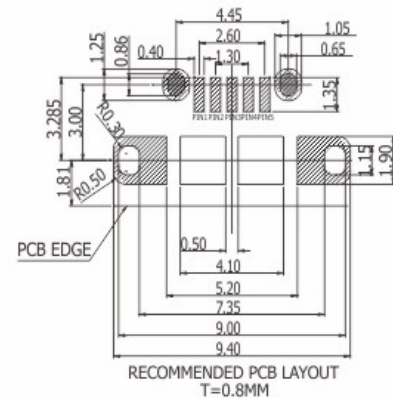
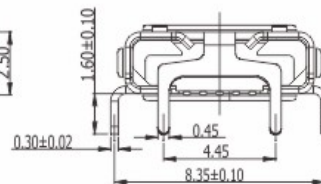
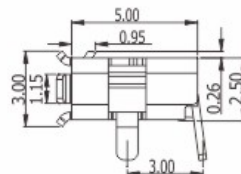
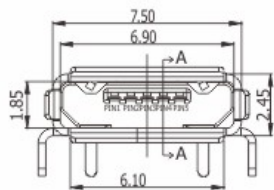
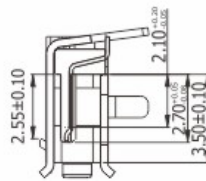
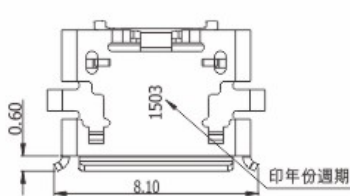
- 1 TERMINAL: C2680 T=0.15
- 2 SHELL: STAINLESS STEEL SUS 304-1/2H T=0.30
- 3 HOUSING: LCP BLACK UL94-V0

2.Plating:

- 1.CONTACT: GOLD FLASH over 50 μ "Ni MIN
- 2.SHELL: 100 μ " MATTE Tin MIN over 50 μ "Ni MIN

3.Electrical:

- 1.Operating Voltage: 250 VAC MAX
- 2.Current rating: 1 A Max.
- 3.Dielectric withstanding voltage: 100 V(ac) for 1 min ute.
- 4.Contact resistance: 30 mohms Max.
- 5.Insulation resistance: 100 Megohms Min.@ 500 VDC
- 6.Temperature range: -30°C ~ 80°C



Ordering Information

186f - XX X X X X X
a b c d e f

a. No. Of Pins
05: 05 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5 μ " selective gold on contact
2: 15 μ " selective gold on contact
3: 30 μ " selective gold on contact

d. Shell Plating
1: Nickel
2: Tin

e. Insulator Color
1: Black
2: White
3: Black high temperature(LCP)

f: Type
3: AB type

MICRO USB TYPE



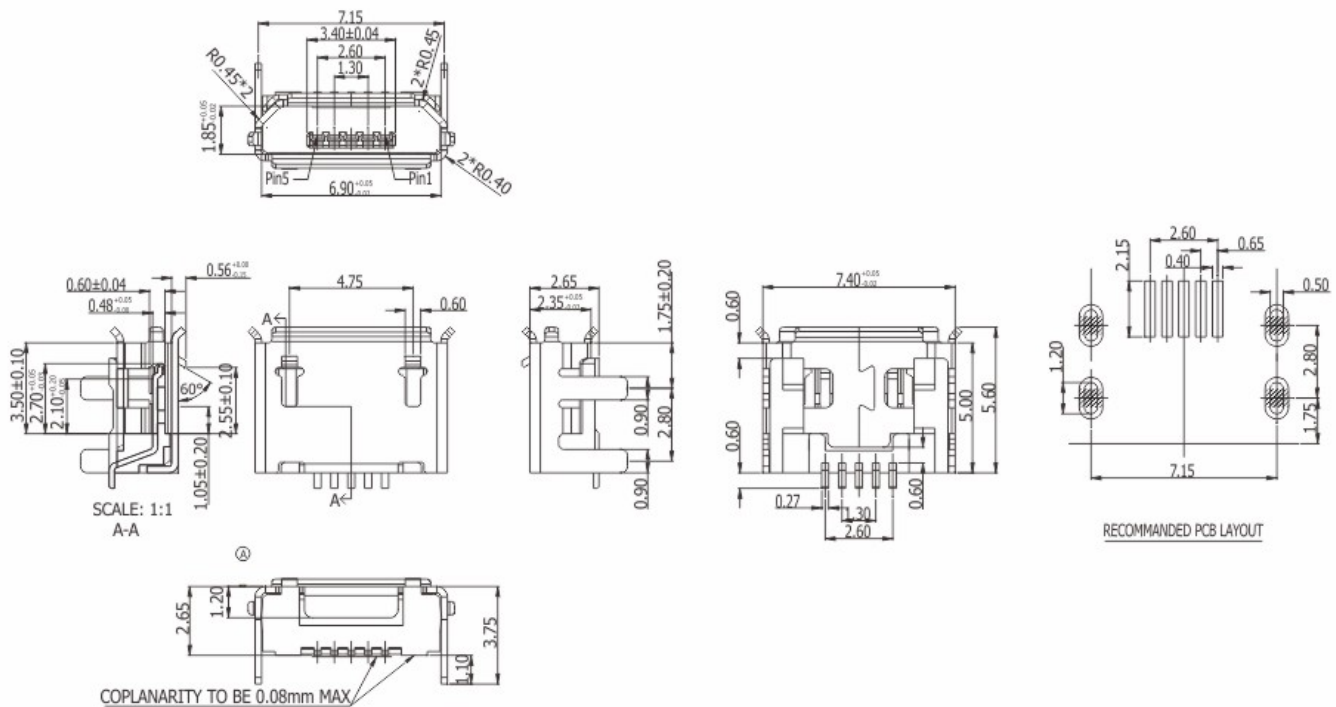
Note:

1.MATERIAL:

- 1.1 TERMINAL: C2680 T=0.2
- 1.2 SHELL: C2680 T=0.25
- 1.3 HOUSING: LCP BLACK UL94-V0

2.Specification:

- 2.1 Current rating: 1 A Max.
- 2.2 Dielectric withstanding voltage: 100 V(ac) for 1 min.
- 2.3 Contact resistance: 30 mohms Max.
- 2.4 Insulation resistance: 100 Megohms Min.
- 2.5 Total mating force: 3.57 Kgf Max.
- 2.6 Total unmating force: 0.82Kgf Min.
- 2.7 Temperature range: -30°C ~ 80°C



Ordering Information

186f - XX X X X X X
a b c d e f

a. No. Of Pins
05: 05 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5µ" selective gold on contact
2: 15µ" selective gold on contact
3: 30µ" selective gold on contact

d. Shell Plating
1: Nickel
2: Tin

e. Insulator Color
1: Black
2: White
3: Black high temperature(LCP)

f: Type
4: B type

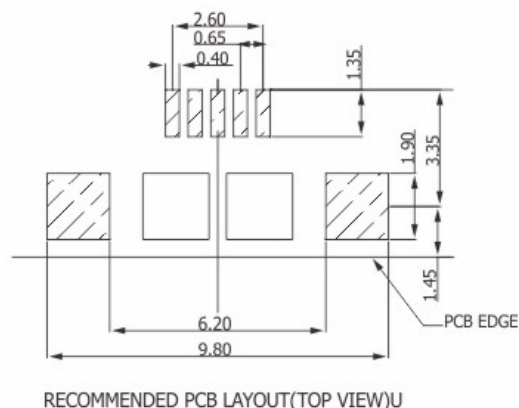
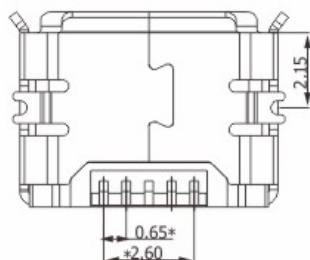
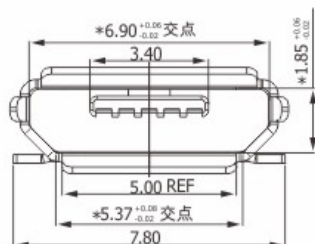
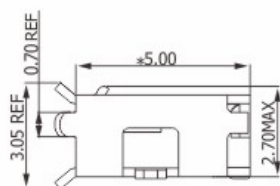
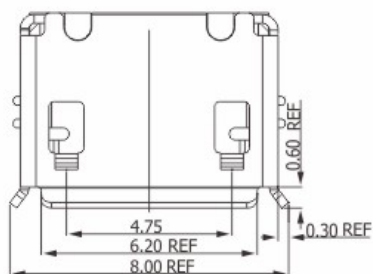
MICRO USB TYPE



Note:

1.Specification:

- 1.1 Current rating: 1 A Max.
- 1.2 Dielectric withstanding voltage: 100 V(ac) for 1 min.
- 1.3 Contact resistance: 50m WMax.
- 1.4 Insulation resistance: 100M WMin.
- 1.5 Total mating force: 3.57 Kgf Max.
- 1.6 Total unmating force: 1.0 Kgf Min.0.81 ~ 2.05 Kgf Min.after 10000 insertion/extraction cycles
- 1.7 Temperature range: -30°C ~ 80°C



Ordering Information

186f - XX X X X X X
a b c d e f

a. No. Of Pins
05: 05 positions

b. Contact Type
2: Female

c. Contact Plating
0: Gold flash selective gold
1: 5μ" selective gold on contact
2: 15μ" selective gold on contact
3: 30μ" selective gold on contact

d. Shell Plating
1: Nickel
2: Tin

e. Insulator Color
1: Black
2: White
3: Black high temperature(LCP)

f: Type
4: B type