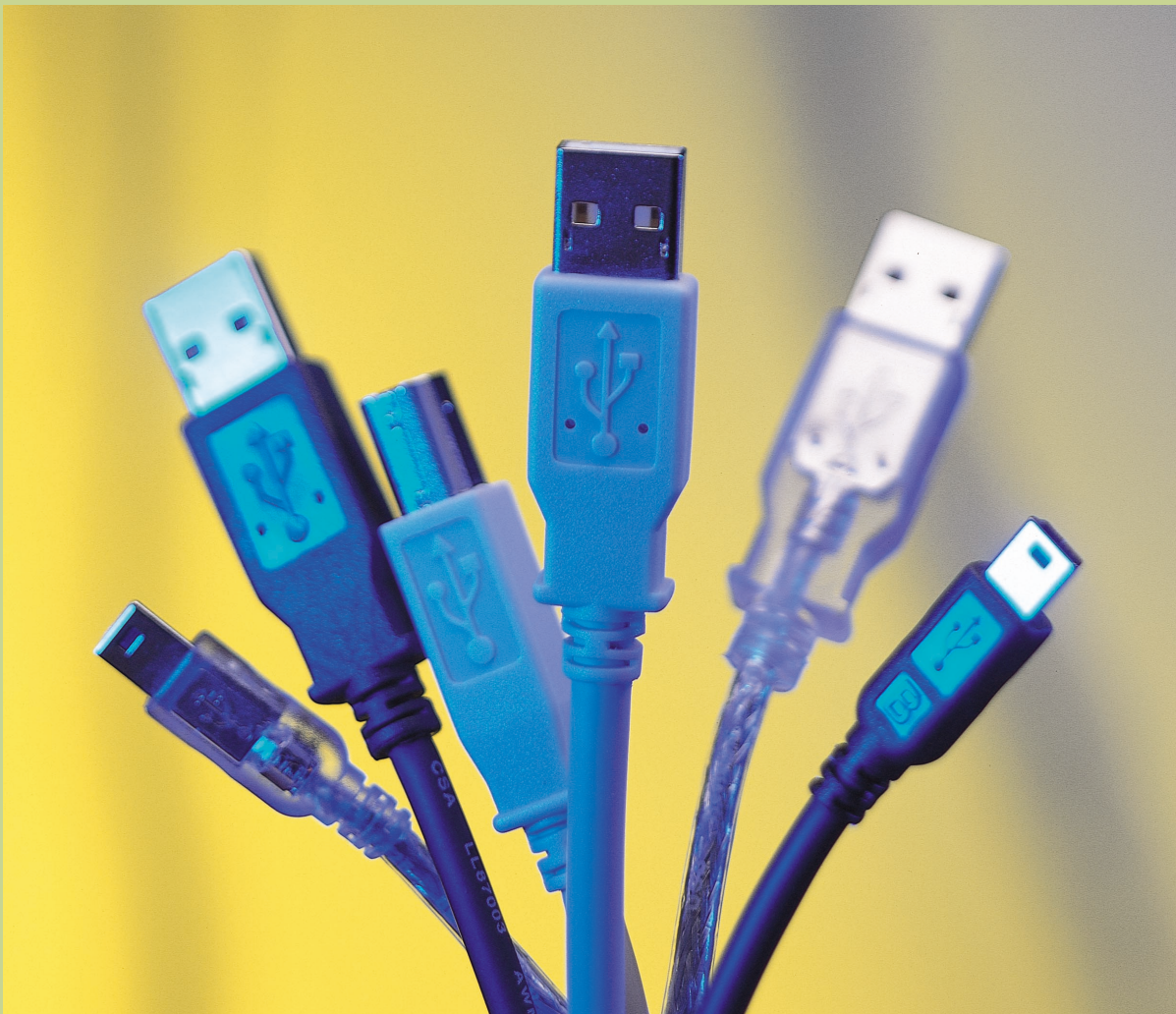


USB  
Connectors

QZF  
series



Honda Connectors

**Conformable with  
Standard Connectors**



# QZF series

## USB Connectors

QZF

### Outline

The QZF series of PC interface 4-contact connectors meet USB (Universal Serial Bus) or USB Ver. 2.0 Specification Revision 2.0 standards, and are designed to transfer signals to and from keyboards, mouse or pointing devices, modems, printers, etc.

### Features

The contacts are plated with gold to withstand many insertions and extractions, providing high reliability.

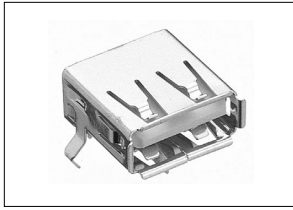
### Electrical Characteristics

USB Standard	
Rated voltage	30V AC (r.m.s.)
Rated current	1A
Insulation resistance	Over 1,000 megohms (at 500V DC)
Withstanding voltage	750V AC (r.m.s.)
Contact resistance	30 milliohms or less

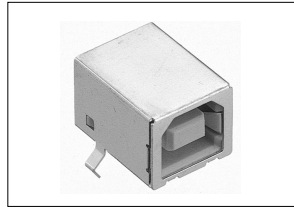
USB Standard, version 2.0		
Type	A and B series	Mini B series
Rated voltage	30V AC (r.m.s.)	
Rated current	1A DC	
Temperature range	0 to 50°C	
Insulation resistance	Over 1.000 megohms	Over 100 megohms
Withstanding voltage	500V AC	100V AC
Cycles of insertion and extraction	1,500	5,000

Before starting the preliminary design of PCBs to use HONDA connectors, be sure to contact us.

## Product List



USB A series of 4-contact  
right-angle DIP type  
female connector  
QZF-A4LFDP  
**A-6**  
QZF series...4



USB B series of 4-contact  
right-angle DIP type  
female connector  
QZF-B4LFDP  
**A-7**  
QZF series...5



USB A and B series of  
cable assembly  
(complying with USB standard)  
QZF-HAB001(-)-L( ) ( )  
**A-8**  
QZF series...6



USB A series of cable assembly  
(complying with USB standard)  
QZF-HA001(-)-L( ) ( )  
**A-9**  
QZF series...7



USB B series of cable assembly  
(complying with USB standard)  
QZF-HB001(-)-L( ) ( )  
**A-10**  
QZF series...8



USB A series of 4-contact  
right-angle DIP type  
female connector  
QZF-A4LFDG( )A2( ) ( )  
**A-11**  
QZF series...9



USB A series of 4-contact  
right-angle SMT type  
female connector  
QZF-A4LFYG( )A2( ) ( )  
**A-12**  
QZF series...10



USB B series of 4-contact  
right-angle DIP type  
female connector  
QZF-B4LFDG( )A2( ) ( )  
**A-13**  
QZF series...11



USB B series of 4-contact  
right-angle SMT type  
female connector  
QZF-B4LFYG( )A2( ) ( )  
**A-14**  
QZF series...12



USB Mini B series of 5-contact  
right-angle SMT type  
female connector  
QZF-MB5LFYG( )A2( ) ( )  
**A-15**  
QZF series...13



USB A and B series of  
cable assembly (complying with  
USB Ver. 2.0 standard)  
QZF-HAB401(-)-L( ) ( )  
**A-16**  
QZF series...14



USB A and Mini B series of  
cable assembly (complying with  
USB standard)  
QZF-HAMB401(-)-L( ) ( )  
**A-17**  
QZF series...15

**Standardized**

**For PCBs**

**Right-angle DIP**

**Complying with USB standard**

**USB A series of 4-contact right-angle DIP type female connector**  
**QZF-A4LFDP**

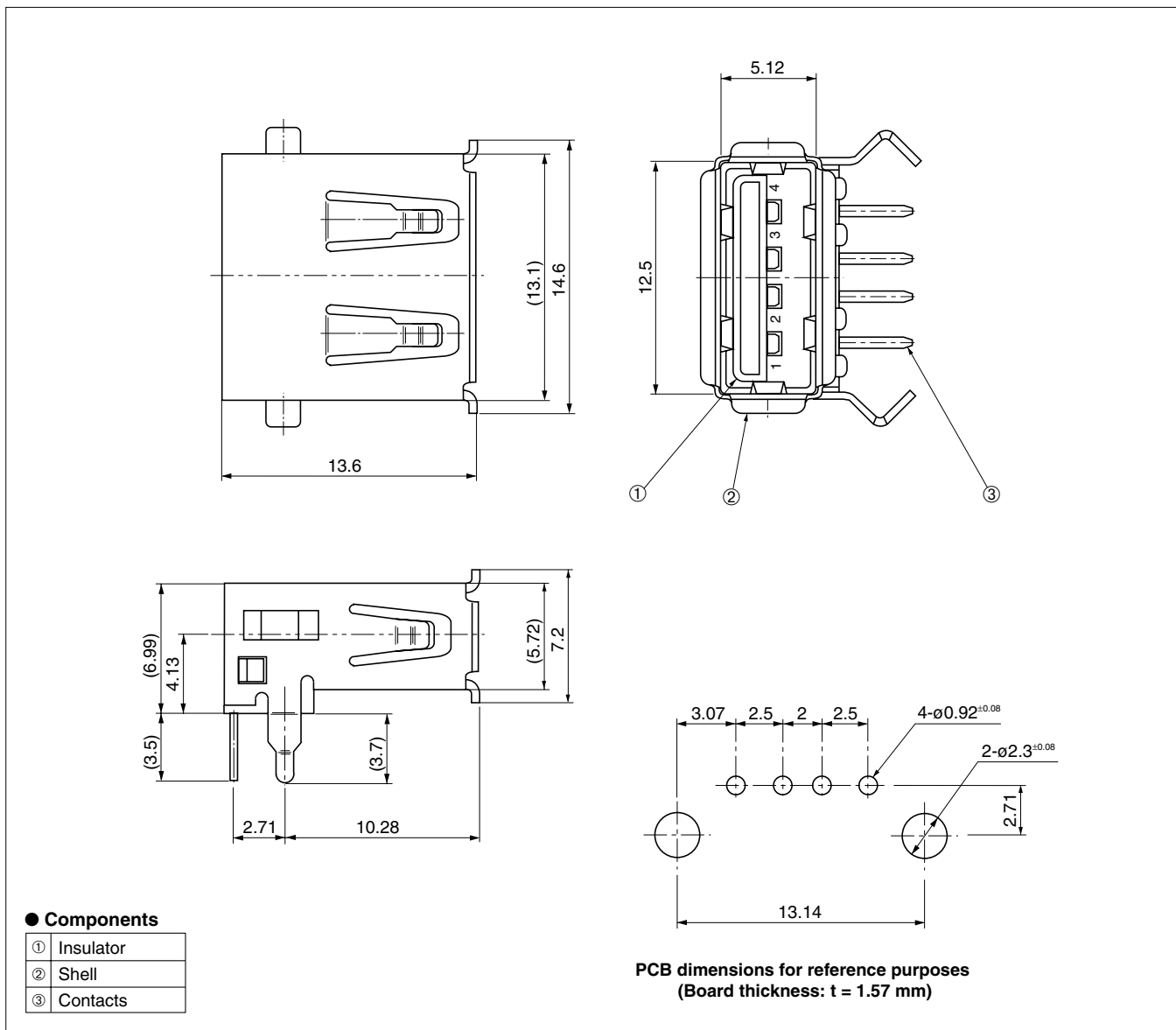


● Configuration of product Part No.

**QZF- A 4 LFDP**

① ② ③ ④

- ① Series name
- ② Type of connector  
A: A series
- ③ No. of contacts: 4
- ④ Form of contact  
LFDP: Right-angle DIP type, female (plated with palladium and gold)



Mating connectors: USB A series of male connectors for cables

**USB B series of 4-contact right-angle DIP type female connector**  
**QZF-B4LFDP**

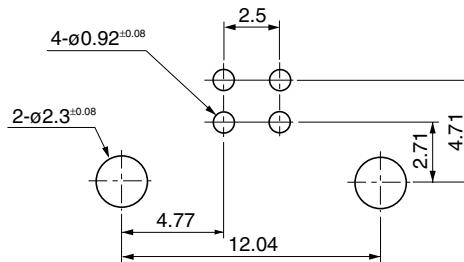
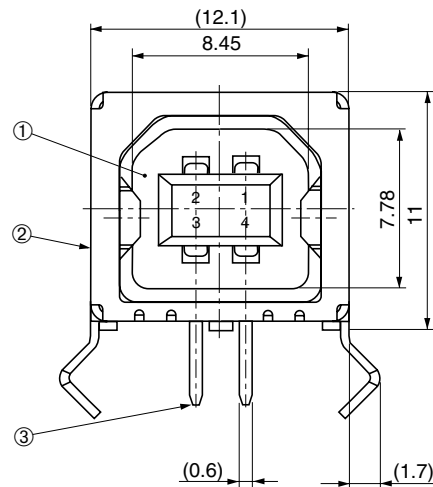
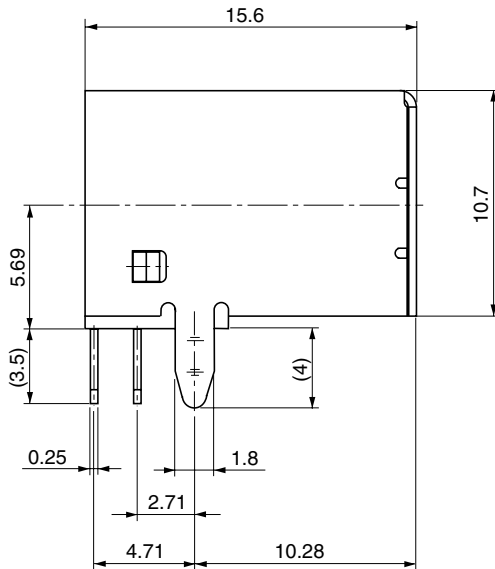


● Configuration of product Part No.

**QZF- B 4 LFDP**

① ② ③ ④

- ① Series name
- ② Type of connector  
B: B series
- ③ No. of contacts: 4
- ④ Form of contact  
LFDP: Right-angle DIP type, female (plated with palladium and gold)



PCB dimensions for reference purposes  
(Board thickness: t = 1.57 mm)

● Components

①	Insulator
②	Shell
③	Contacts

Mating connectors: USB B series of male connectors for cables

Standardized

For cables

Straight soldering type

Complying with USB standard

HONDA TSUSHIN KOGYO CO., LTD.

## USB A and B series of cable assembly (complying with USB standard) QZF-HAB001( )-L( )( )

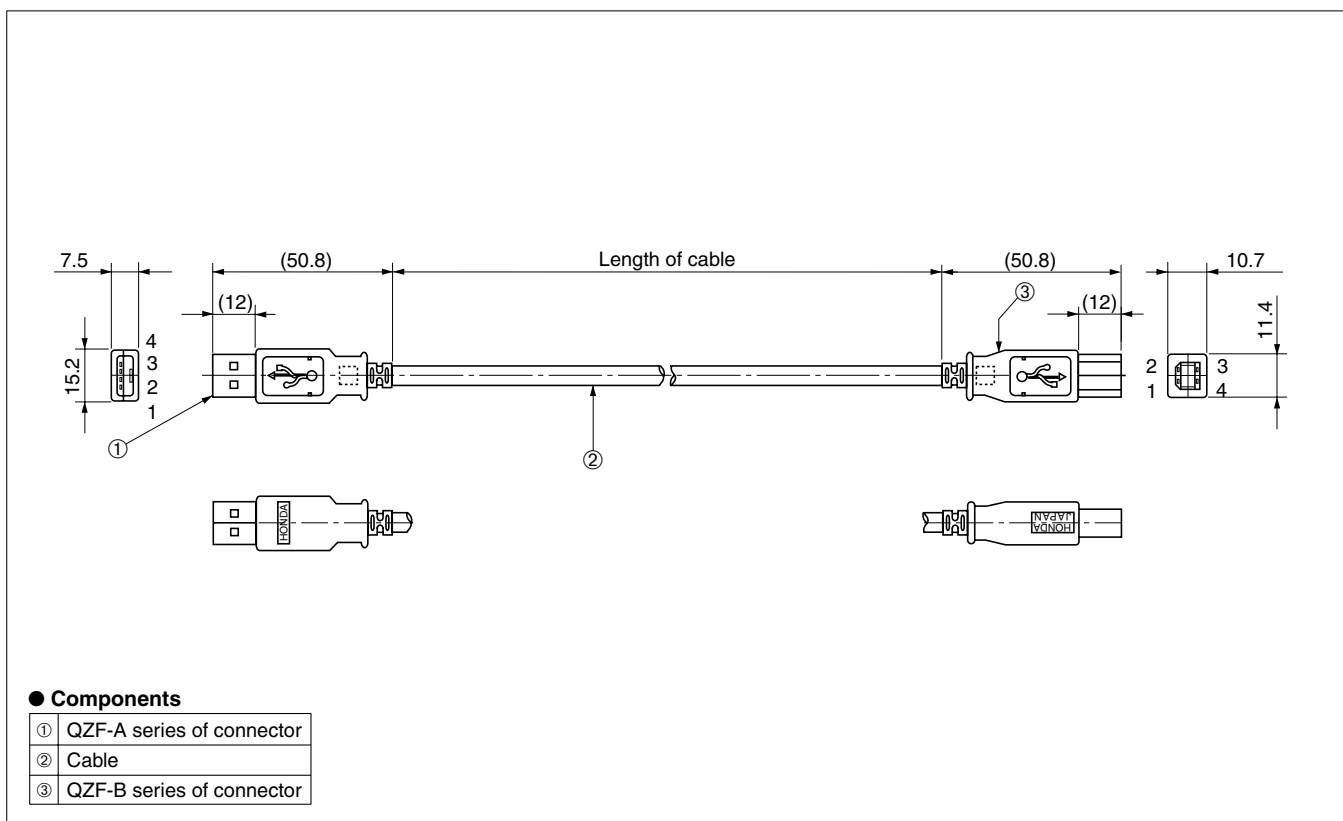


### ● Configuration of product Part No.

## QZF- HAB 001 ( )- L( ) ( )

①      ②      ③      ④      ⑤      ⑥

- ① Series name
- ② Types of connector  
HAB: A and B series
- ③ Serial number
- ④ Type of cable
  - A: One pair of AWG28 stranded cables and two AWG20 cables, which are shielded.
  - B: One pair of AWG28 stranded cables and two AWG22 cables, which are shielded.
  - C: One pair of AWG28 stranded cables and two AWG24 cables, which are shielded.
  - D: One pair of AWG28 stranded cables and two AWG26 cables, which are shielded.
  - E: One pair of AWG28 stranded cables and two AWG28 cables, which are shielded.
  - F: One pair of AWG28 stranded cables and two AWG20 cables, which are not shielded.
  - G: One pair of AWG28 stranded cables and two AWG22 cables, which are not shielded.
  - H: One pair of AWG28 stranded cables and two AWG24 cables, which are not shielded.
  - J: One pair of AWG28 stranded cables and two AWG26 cables, which are not shielded.
  - K: One pair of AWG28 stranded cables and two AWG28 cables, which are not shielded.
- ⑤ Length of cable (cm): 100, 200, 300, 400 or 500
- ⑥ Color of connector and cable  
Blank: Ivory  
A : Red  
B : Blue  
C : Yellow  
D : Black



**Mating connectors:** USB A series of right-angle DIP type female connector for PCBs

USB B series of right-angle DIP type female connector for PCBs

**USB A series of cable assembly  
(complying with USB standard)  
QZF-HA001( )-L( )( )**

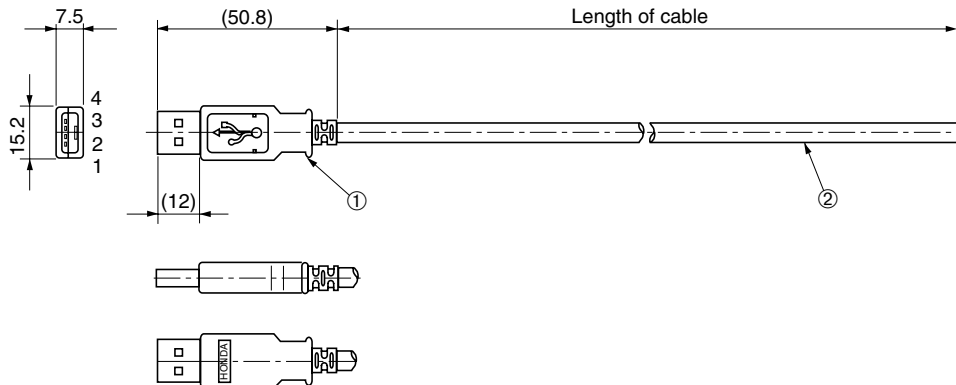


● Configuration of product Part No.

**QZF- HA 001 ( )- L( ) ( )**

① ② ③ ④ ⑤ ⑥

- ① Series name
- ② Types of connector  
HA: A series
- ③ Serial number
- ④ Type of cable  
A: One pair of AWG28 stranded cables and two AWG20 cables, which are shielded.  
B: One pair of AWG28 stranded cables and two AWG22 cables, which are shielded.  
C: One pair of AWG28 stranded cables and two AWG24 cables, which are shielded.  
D: One pair of AWG28 stranded cables and two AWG26 cables, which are shielded.  
E: One pair of AWG28 stranded cables and two AWG28 cables, which are shielded.  
F: One pair of AWG28 stranded cables and two AWG20 cables, which are not shielded.  
G: One pair of AWG28 stranded cables and two AWG22 cables, which are not shielded.  
H: One pair of AWG28 stranded cables and two AWG24 cables, which are not shielded.  
J: One pair of AWG28 stranded cables and two AWG26 cables, which are not shielded.  
K: One pair of AWG28 stranded cables and two AWG28 cables, which are not shielded.
- ⑤ Length of cable (cm): 100, 200, 300, 400 or 500
- ⑥ Color of connector and cable  
Blank: Ivory  
A : Red  
B : Blue  
C : Yellow  
D : Black



● Components

①	QZF-A series of male connector
②	Cable

Mating connectors: USB A series of right-angle DIP type female connector for PCBs

Standardized

For cables

Straight soldering type

Complying with USB standard

HONDA TSUSHIN KOGYO CO., LTD.

## USB B series of cable assembly (complying with USB standard) QZF-HB001( )-L( )( )

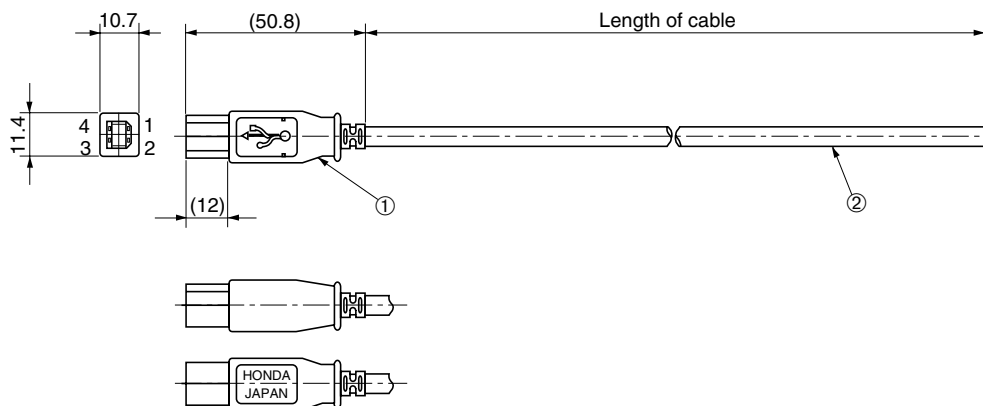


### ● Configuration of product Part No.

## QZF- HB 001 ( )- L( ) ( )

①      ②      ③      ④      ⑤      ⑥

- ① Series name  
 ② Types of connector  
 HB: B series  
 ③ Serial number  
 ④ Type of cable  
 A: One pair of AWG28 stranded cables and two AWG20 cables, which are shielded.  
 B: One pair of AWG28 stranded cables and two AWG22 cables, which are shielded.  
 C: One pair of AWG28 stranded cables and two AWG24 cables, which are shielded.  
 D: One pair of AWG28 stranded cables and two AWG26 cables, which are shielded.  
 E: One pair of AWG28 stranded cables and two AWG28 cables, which are shielded.  
 F: One pair of AWG28 stranded cables and two AWG20 cables, which are not shielded.  
 G: One pair of AWG28 stranded cables and two AWG22 cables, which are not shielded.  
 H: One pair of AWG28 stranded cables and two AWG24 cables, which are not shielded.  
 J: One pair of AWG28 stranded cables and two AWG26 cables, which are not shielded.  
 K: One pair of AWG28 stranded cables and two AWG28 cables, which are not shielded.  
 ⑤ Length of cable (cm): 100, 200, 300, 400 or 500  
 ⑥ Color of connector and cable  
 Blank: Ivory  
 A : Red  
 B : Blue  
 C : Yellow  
 D : Black



### ● Components

①	QZF-B series of male connector
②	Cable

**Mating connectors:** USB B series of right-angle DIP type female connector for PCBs

**USB A series of 4-contact right-angle DIP type female connector**  
**QZF-A4LFDG( )A2( )( )**

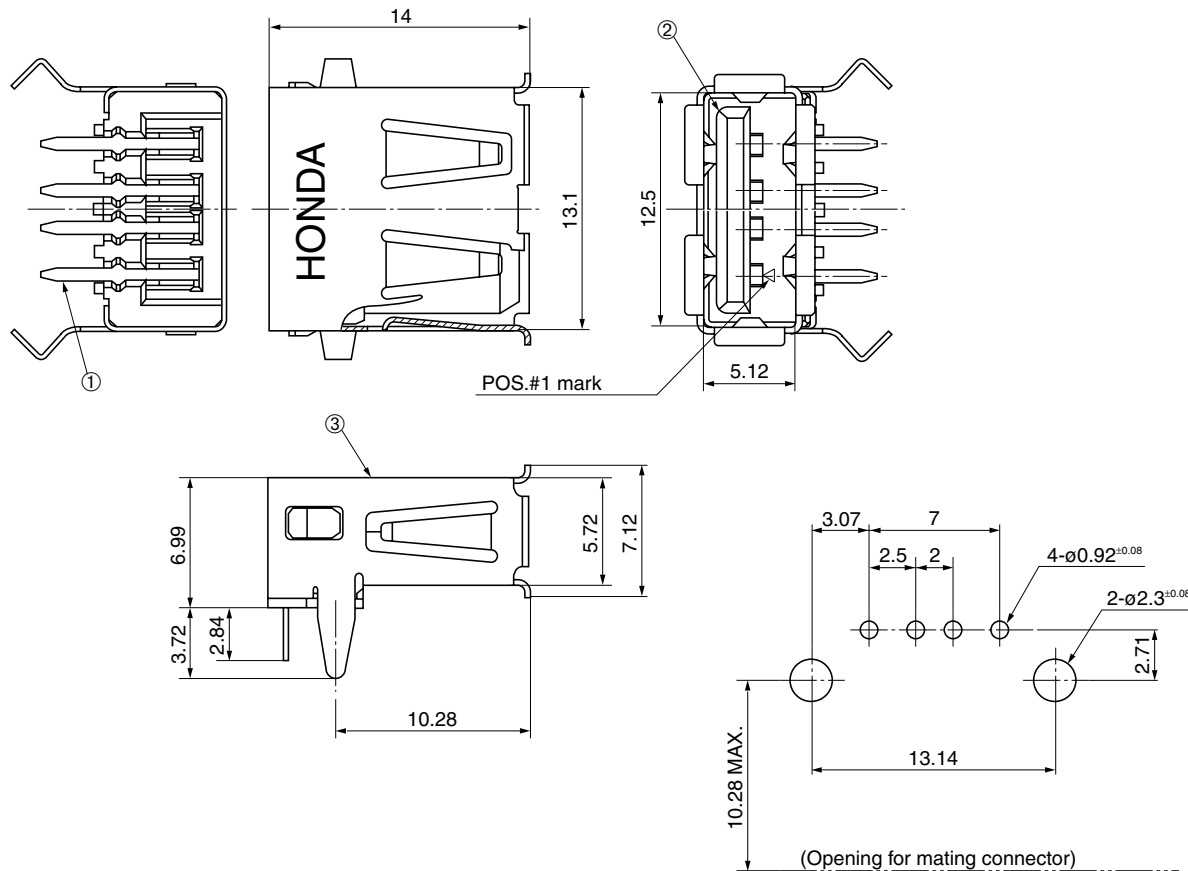


● Configuration of product Part No.

**QZF- A 4 LFD G( ) A2 ( ) ( )**

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series name
- ② Type of connector  
A: A series
- ③ No. of contacts: 4
- ④ Form of contact  
LFD: Right-angle DIP type, female
- ⑤ Contact plating  
G7: 0.76 μm Gold plate
- ⑥ Color of insulator  
K: White
- ⑦ Logo mark  
#H: HONDA



PCB dimensions for reference purposes  
(Board thickness: t = 1.57 mm)

● Components

①	Contacts
②	Insulator
③	Shell

**Mating connectors:** USB A series of male connectors for cables (Complying with USB Ver. 2.0 standard)

Standardized

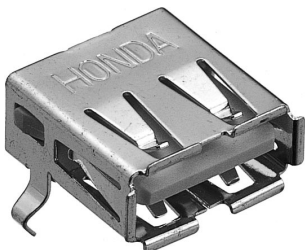
For PCBs

Right-angle SMT

Complying with USB Ver. 2.0 standard

USB A series of 4-contact right-angle SMT type female connector

QZF-A4LFYG( )A2( )( )

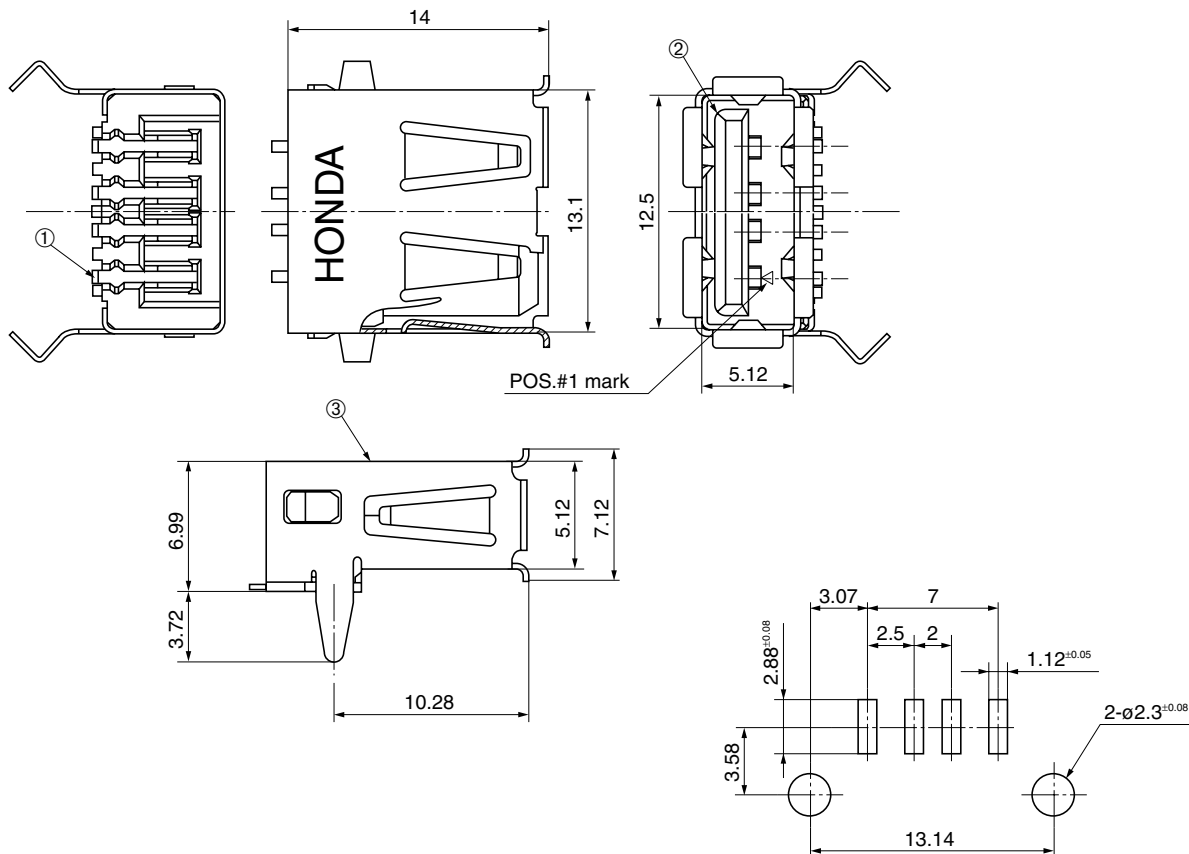


● Configuration of product Part No.

QZF- A 4 LFY G( ) A2 ( ) ( )

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series name
- ② Type of connector  
A: A series
- ③ No. of contacts: 4
- ④ Form of contact  
LFY: Right-angle SMT type, female
- ⑤ Contact plating  
G7: 0.76 μm Gold plate
- ⑥ Color of insulator  
K: White
- ⑦ Logo mark  
#H: HONDA



● Components

①	Contacts
②	Insulator
③	Shell

PCB dimensions for reference purposes  
(Board thickness: t = 1.57 mm)

Mating connectors: USB A series of male connectors for cables



**Standardized**

**For PCBs**

**Right-angle SMT**

**Complying with USB Ver. 2.0 standard**

**USB B series of 4-contact right-angle SMT type female connector**  
**QZF-B4LFYG( )A2( )( )**

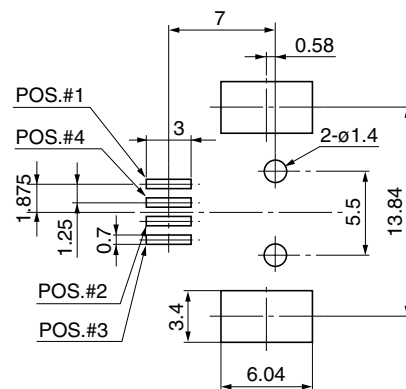
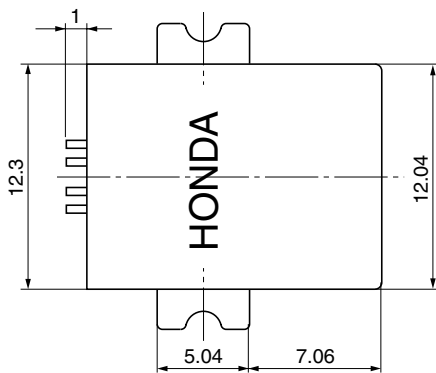


● Configuration of product Part No.

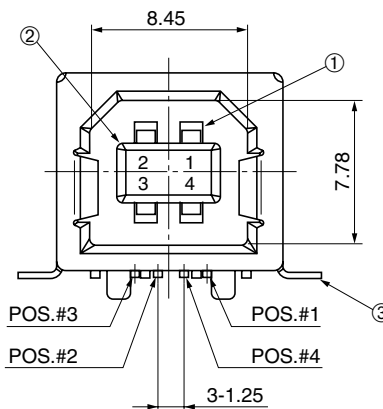
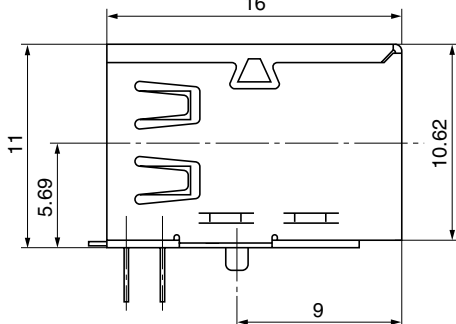
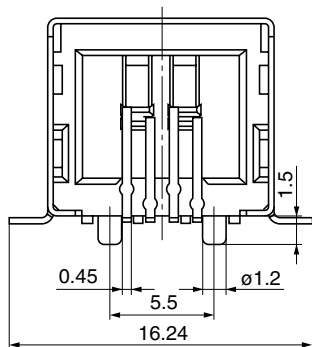
**QZF- B 4 LFY G( ) A2 ( ) ( )**

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series name
- ② Type of connector  
B: B series
- ③ No. of contacts: 4
- ④ Form of contact  
LFY: Right-angle SMT type, female
- ⑤ Contact plating  
G7: 0.76 μm Gold plate
- ⑥ Color of insulator  
K: White
- ⑦ Logo mark  
#H: HONDA



PCB dimensions for reference purposes  
(Board thickness: t = 1.57 mm)



● Components

①	Contacts
②	Insulator
③	Shell

Mating connectors: USB B series of male connectors for cables

**USB Mini B series of 5-contact right-angle SMT type female connector**  
**QZF-MB5LFYG( )A2( )( )**

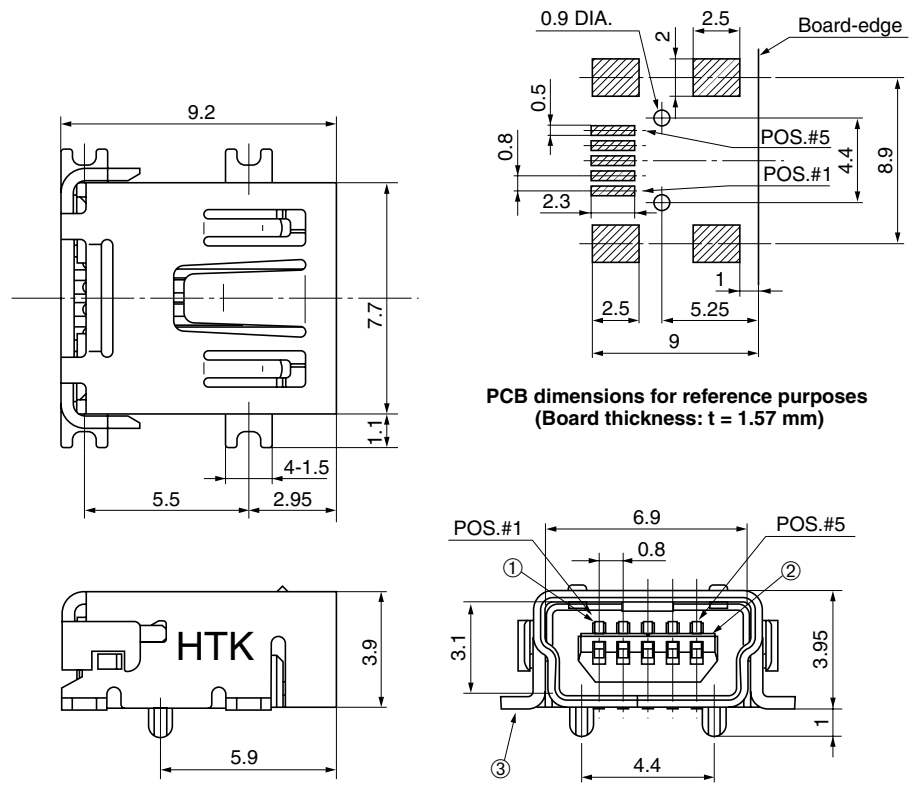


● Configuration of product Part No.

**QZF- MB 5 LFY G( ) A2 ( ) ( )**

① ② ③ ④ ⑤ ⑥ ⑦

- ① Series name
- ② Type of connector  
MB: Mini B series
- ③ No. of contacts: 5
- ④ Form of contact  
LFY: Right-angle SMT type, female
- ⑤ Contact plating  
G7: 0.76 μm Gold plate
- ⑥ Color of insulator  
D: Black
- ⑦ Logo mark  
#H: HONDA



● Components

①	Contacts
②	Insulator
③	Shell

Mating connectors: USB Mini B series of male connectors for cables (Complying with USB Ver. 2.0 standard)

Standardized

For cables

Straight soldering type

Complying with USB Ver. 2.0 standard

HONDA TSUSHIN KOGYO CO., LTD.

## USB A and B series of cable assembly (complying with USB Ver. 2.0 standard) QZF-HAB401( )-L( )( )

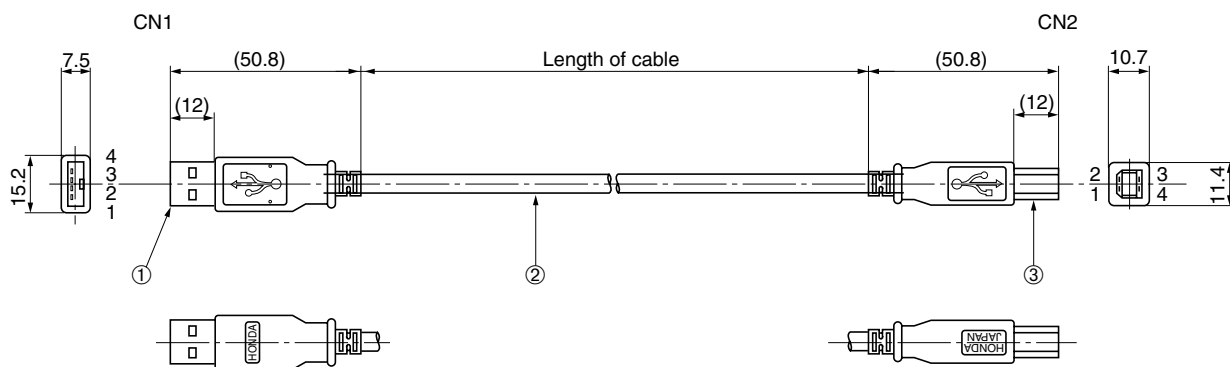


### ● Configuration of product Part No.

## QZF- HAB 401 ( )- L( ) ( )

①      ②      ③      ④      ⑤

- ① Series name
- ② Type of connector  
HAB: A and B series
- ③ Type of cable  
C: One pair of AWG24 stranded cables and two AWG28 cables and AWG28 drain wires, which are shielded.  
E: One pair of AWG28 stranded cables and two AWG28 cables and AWG28 drain wires, which are shielded.
- ④ Length of cable  
Up to 500 cm in 10 cm increments (In the case of C type of cable as above)  
Up to 300 cm in 10 cm increments (In the case of E type of cable as above)
- ⑤ Color of insulator  
Blank: Ivory white  
D : Black



### ● Components

①	QZF-A series of connector
②	Cable
③	QZF-B series of connector

**Mating connectors:** USB A series of right-angle DIP type female connector for PCBs (Complying with USB Ver. 2.0 standard)

USB A series of right-angle SMT type female connector for PCBs (Complying with USB Ver. 2.0 standard)

USB B series of right-angle DIP type female connector for PCBs (Complying with USB Ver. 2.0 standard)

USB B series of right-angle SMT type female connector for PCBs (Complying with USB Ver. 2.0 standard)

**USB A and Mini B series of cable assembly  
(complying with USB standard)  
QZF-HAMB401( )-L( )( )**

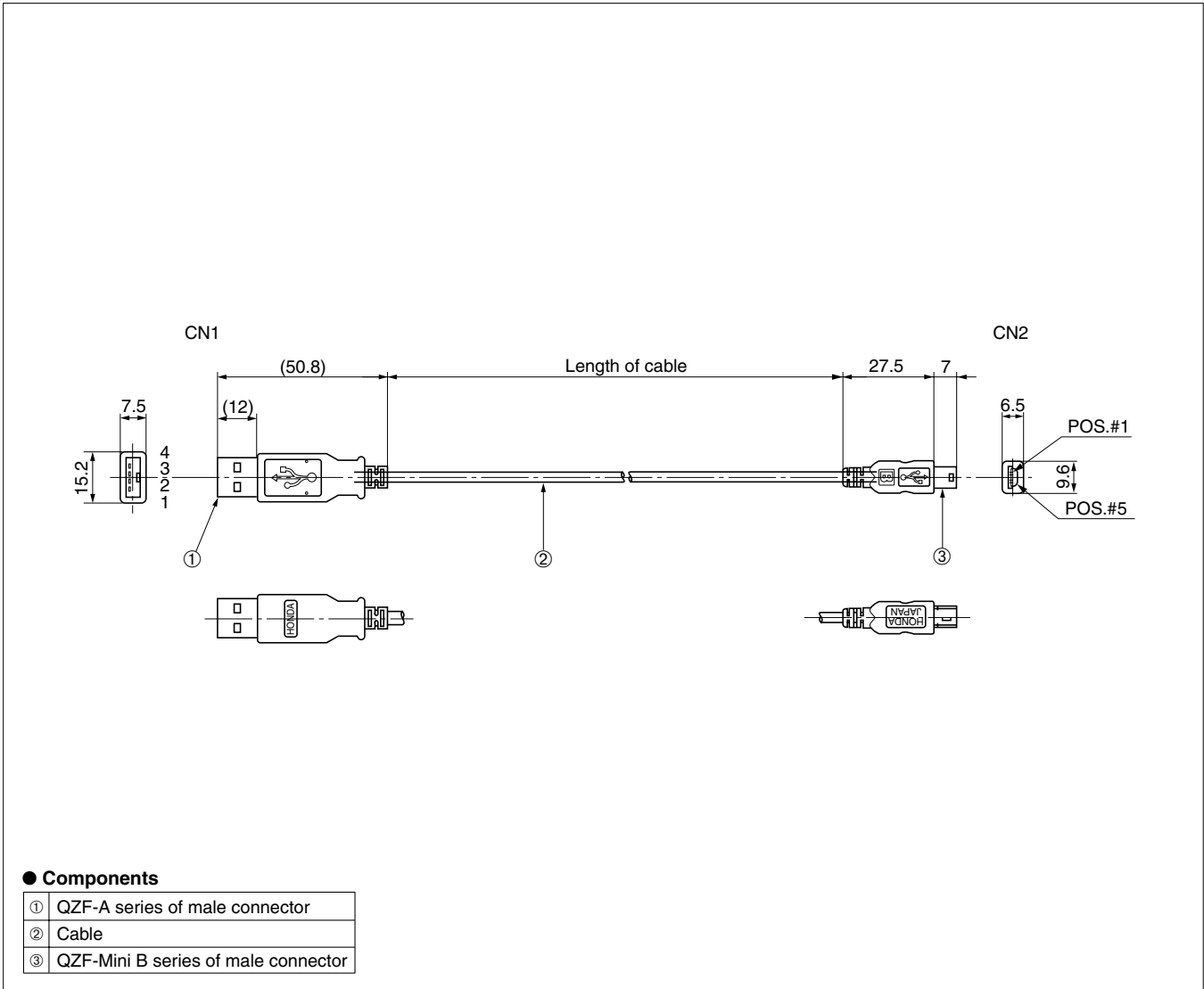


● Configuration of product Part No.

**QZF- HAMB 401 ( )- L( ) ( )**

①                      ②                      ③                      ④                      ⑤

- ① Series name
- ② Type of connector  
HAMB: A and Mini B series
- ③ Type of cable  
E: One pair of AWG28 stranded cables and two AWG28 cables and AWG28 drain wires, which are shielded.
- ④ Length of cable  
Up to 300 cm in 10 cm increments
- ⑤ Color of connector and cable  
Blank: Ivory white  
D : Black



● Components

①	QZF-A series of male connector
②	Cable
③	QZF-Mini B series of male connector

**Mating connectors:** USB A series of right-angle DIP type female connector for PCBs (Complying with USB Ver. 2.0 standard)

USB A series of right-angle SMT type female connector for PCBs (Complying with USB Ver. 2.0 standard)

USB Mini B series of right-angle SMT type female connector for PCBs (Complying with USB Ver. 2.0 standard)