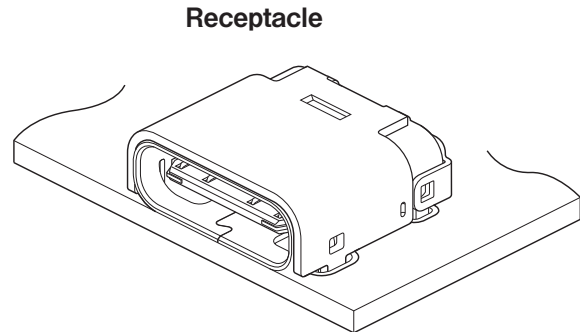
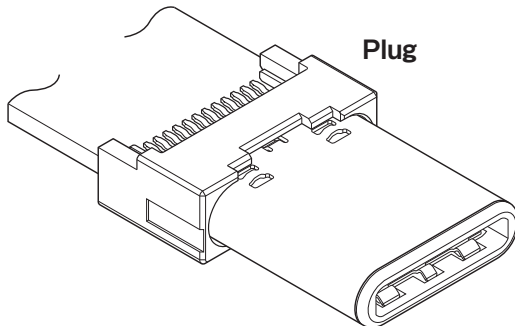




# UBC CONNECTOR

USB (Universal Serial Bus) standard-compliant connector



This connector is a USB (Universal Serial Bus) Type-C compliant interface connector and power supply of up to 100 W is available. The receptacle is USB4 standard certified product with a data transmission speed of up to 40 Gbps. It has a reversible construction, so that insertion and extraction without having to worry about the orientation (both sides) of the plug is possible.

- Assuring 10,000 cycles insertion and withdrawal as durability
- Halogen-free

## Plug

- As cover housing is used for this UBC connector, preventing the resin for overmolding from coming into the inside of the connector in a harness processing process is realized.

## Receptacle

- Providing robust structure by double shell structure (Single structure shell is also available).
- Contact lead is the hybrid specifications of DIP/SMT.

## Specifications

- Current rating:
  - 1.25 A DC/Pin Vbus (A4, A9, B4, B9)  
GND (A1, A12, B1, B12)  
CC1 (A5)  
CC2 (B5)
  - 0.25 A DC/Pin Other circuits
- Voltage rating: 20 V AC
- Temperature range: -25°C to +85°C  
(including temperature rise in applying electrical current)
- Contact resistance:
  - Initial value/ 40 mΩ max.
  - After environmental tests/ 50 mΩ max.
- Insulation resistance: 100 MΩ min.
- Withstanding voltage:
  - There shall be no breakdown or flashover while applying 100 VAC for one minute.
- \* In using the products, refer to "Handling Precautions for Terminals and Connectors" described on our website (Technical documents of Product information page).
- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

# UBC CONNECTOR

## Plug

TID No. : 5200000193

Note: A1, A12, B1, and B12 show the circuit numbers.

Model No.		Q'ty/box
UBC-P-514-7B(HF)		3,888
Material and Finish		
Housing	Heat resisting resin, UL94V-0, black	
Contact A	Copper alloy, nickel-undercoated, selective gold-plated selective tin-plated	
Contact B		
Shell	Stainless steel	
Ground bar		
Lock	Stainless steel, nickel-undercoated, tin-plated	
Center ground plate	Stainless steel	
Cover housing	Heat resisting resin, UL94V-0, black	
Polyimide tape	Polyimide	

## Receptacle (On-board specification)

**Normal type**  
TID No. : 6916

Note: A1, A12, B1, and B12 show the circuit numbers.

Model No.		Q'ty/reel
UBC-R1B12-56C-7ATS(HF)		1,000
Material and Finish		
Contact A	Copper alloy, nickel-undercoated, selective nickel-palladium alloy-plated selective gold-plated	
Contact B		
Housing	Heat resisting resin, UL94V-0, black	
EMC pad	Stainless steel	
Mid plate	Stainless steel, nickel-undercoated, selective gold-plated	
Shell	Stainless steel, nickel-undercoated, tin-plated	
Cover shell		

**Low profile type**

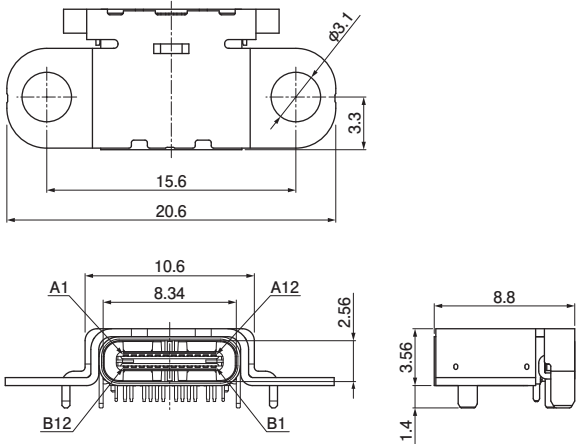
Note: A1, A12, B1, and B12 show the circuit numbers.

Model No.		Q'ty/reel
UBC-R1AB12-56C-7ATS(HF)		1,000
Material and Finish		
Contact A	Copper alloy, nickel-undercoated, selective nickel-palladium alloy-plated selective gold-plated	
Contact B		
Housing	Heat resisting resin, UL94V-0, black	
EMC pad	Stainless steel	
Mid plate	Stainless steel, nickel-undercoated, selective gold-plated	
Shell	Stainless steel, nickel-undercoated, tin-plated	

# UBC CONNECTOR

## Receptacle (On-board specification)

**Pry resistance enhanced type**  
**TIDNo. : 7159**

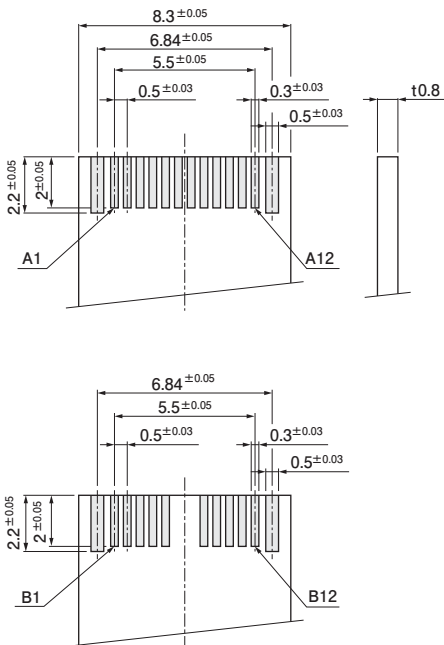


Note: A1, A12, B1, and B12 show the circuit numbers.

Model No.		Q'ty/reel
UBC-R9AB12-56C-7ATS(HF)		1,300
Material and Finish		
Contact A	Copper alloy, nickel-undercoated, selective nickel-palladium alloy-plated	
Contact B	nickel-undercoated, selective gold-plated	
Housing	Heat resisting resin, UL94V-0, black	
EMC pad	Stainless steel	
Mid plate	Stainless steel, nickel-undercoated, selective gold-plated	
Shell	Stainless steel, nickel-undercoated, tin-plated	
Cover shell	Stainless steel, nickel-plated	

## PC board layout

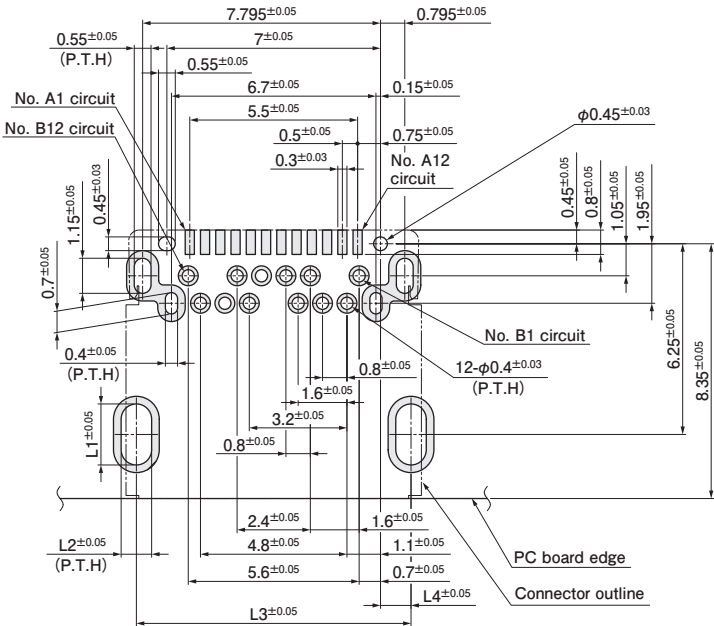
### Plug



Note: 1. Tolerance for the PCB pad pitch shall be  $\pm 0.03$ , and shall not accumulate more than  $\pm 0.05$ .  
 2. Please contact JST for details as the dimensions shown in the above figure are reference values.

## PC board layout

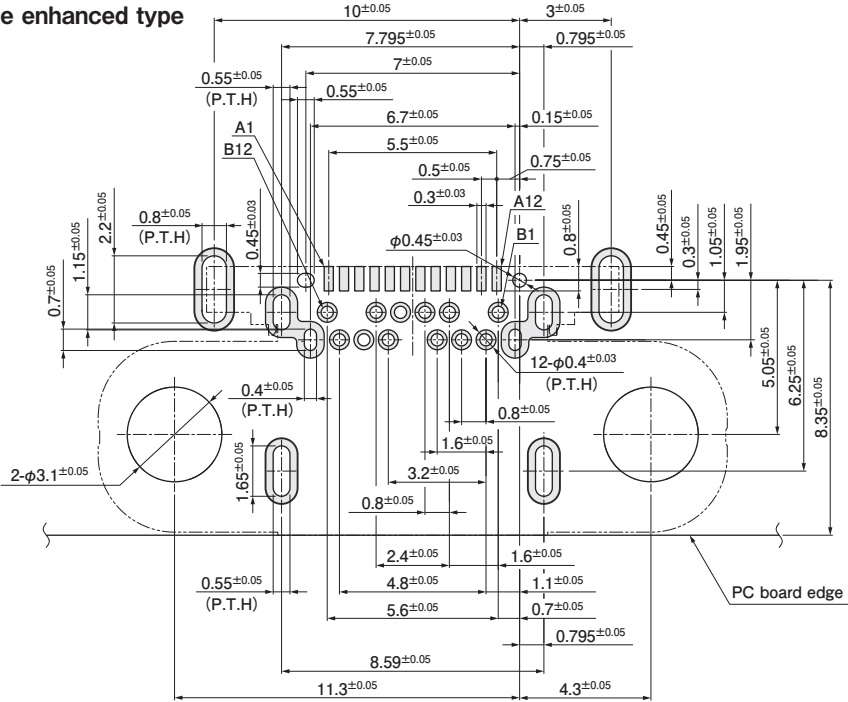
Receptacle  
(On-board specification)  
Normal type,  
Low profile type



Recommended PC board thickness: t1.0

Type	Model No.	Dimensions (mm)			
		L1	L2	L3	L4
Normal type	UBC-R1B12-56C-7ATS (HF)	2	1	9	1
Low profile type	UBC-R1AB12-56C-7ATS (HF)	1.65	0.55	8.59	0.795

Receptacle  
(On-board specification)  
Pry resistance enhanced type



Recommended PC board thickness: t1.0

Note: 1. The figure of PC board layout is the figure viewed from the connector mounting side.  
2. Tolerance for the PCB pad pitch shall be  $\pm 0.05$ , and shall not accumulate more than  $\pm 0.05$ .  
3. Please contact JST for details as the dimensions shown in the above figure are reference values.