

**NEW**



# USB Type-C™ Connector DX07 Series Vertical Plug

CONNECTOR

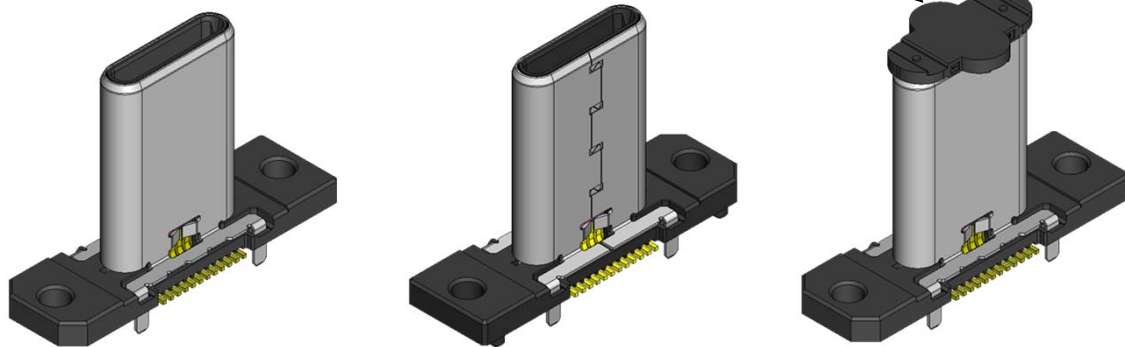
MB-0332-1

July 2018

**RoHS Compliant**

\*Plug will be packaged with protective cap on.

Protective Cap



The DX07 Series Vertical Plug is a straight plug compatible with the next-generation USB specification “USB Type-C™”.

Note) USB Type-C™ is a trademark of USB Implementers Forum, Inc.

## Features

- Mating compatible with USB Type-C receptacle connector
- Surface mount type, vertical 24-position plug with consideration for docking setup
- Reversible plug makes it possible to insert both ways
- Low retention force to prevent the dock from being lifted when removing from dock
- With  $\phi 1.6\text{mm}$  holes for screw fastening to the housing or board
- Through-hole soldering tab to enhance strength against lateral load
- Easy to insert with a smooth radius on the mating area of the metal outer shell
- Supplied with a protective cap preventing terminal deformation and foreign object ingress

## Applications

Docking stations and accessories for Smartphones, tablets, PCs, camcorders, digital still cameras, and others

## General Specifications

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>■ Number of Contacts: 24 pos.</li> <li>■ Contact Resistance:<br/>40m<math>\Omega</math> max.(initial)</li> <li>■ Dielectric Withstanding Voltage:<br/>100Vrms / 1 minute</li> <li>■ Insulation Resistance:<br/>100M<math>\Omega</math> min.(initial)</li> </ul> | <ul style="list-style-type: none"> <li>■ Rated Current:<br/>V<sub>BUS</sub> (Terminal No. A4, A9, B4, B9) DC 5A (Total)<br/>GND (Terminal No. A1,A12,B1,B12) DC 6.25A (Total)<br/>V<sub>CONN</sub> (Terminal No. B5) DC 1.25A<br/>Others: DC 0.25A / pin</li> <li>■ Rated Voltage: 20Vrms</li> <li>■ Mating Durability: 10,000 times</li> <li>■ Operating Temperature: -30 Deg. C to +80 Deg. C</li> </ul> |
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**Materials and Finishes**

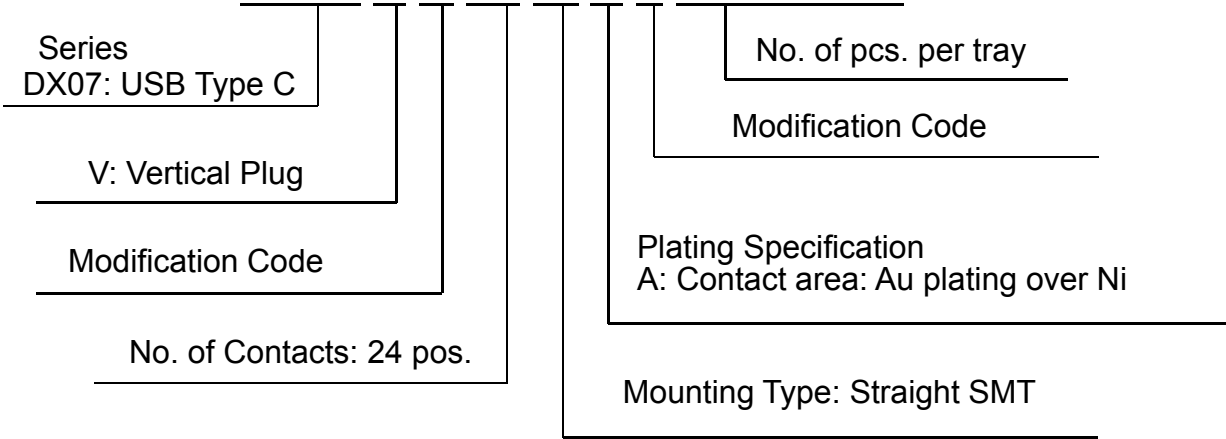
Component	Material / Finish
Contact	Copper alloy / Contact area: Au plating over Ni Terminal area: Au flash plating over Ni
Shell	Stainless steel / nickel plating
Inner Shield	Stainless steel / nickel plating
Insulator	Heat resistant resin / Black (Halogen-free)
Inner Insulator	Heat resistant resin / Black (Halogen-free)
Insulation Tape	Polyimide
Protective Cap	Heat resistant resin / Black (Halogen-free)

Note) Please refer to the product drawings for more details.

**Ordering Information**

[Plug Side]

**DX07 V N 24 W A 2 C \* \* \* \***

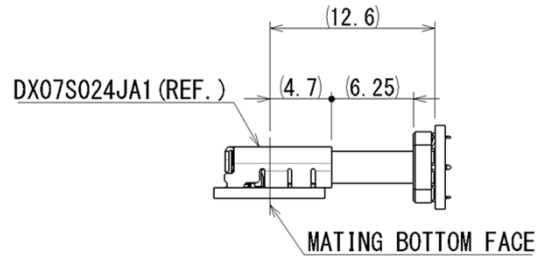
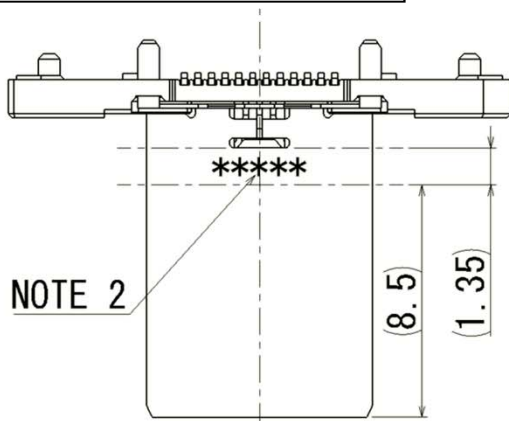


Plug	Part Number	Drawing No.	Specifications
Vertical Plug	DX07VN24WA2 (Individual Connector)	SJ119572	JACS-30353-12
	DX07VN24WA2C1568 (Tray Supplied Product)	SJ119573	

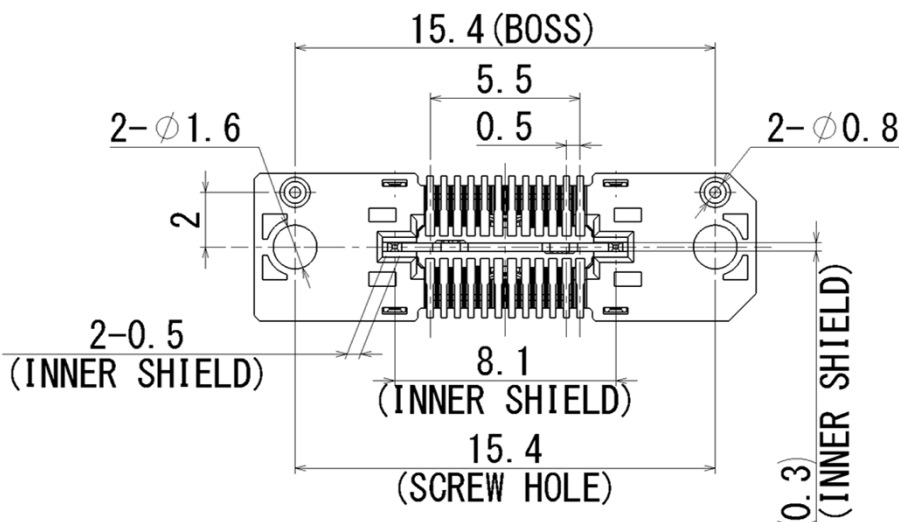
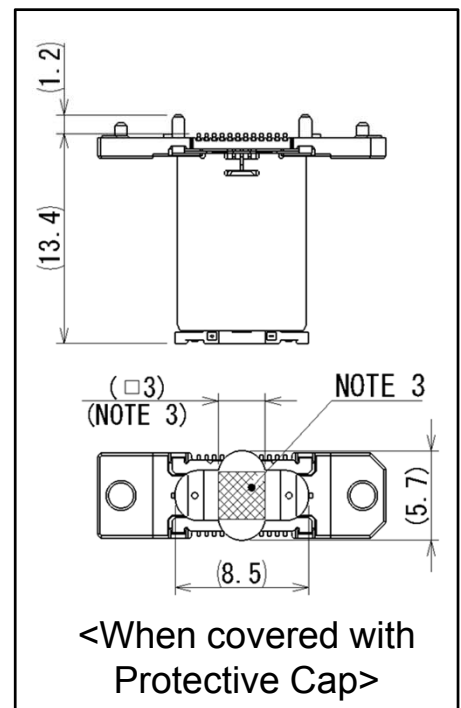
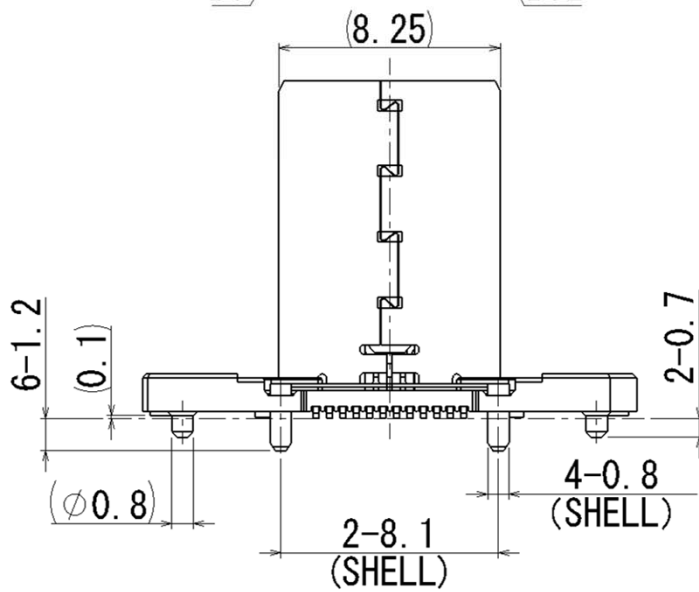
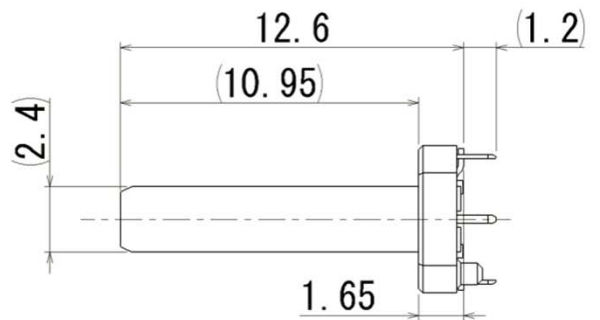
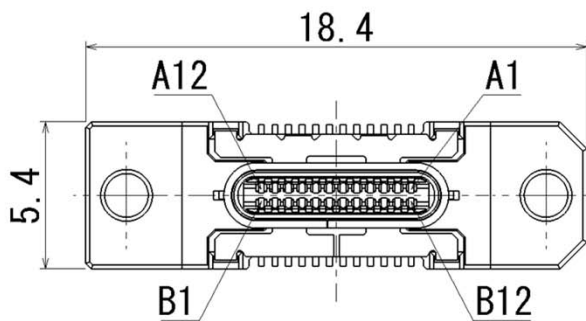
Note) Please order in tray units.

Unit: mm

**DX07VN24WA2 (Vertical Plug)**

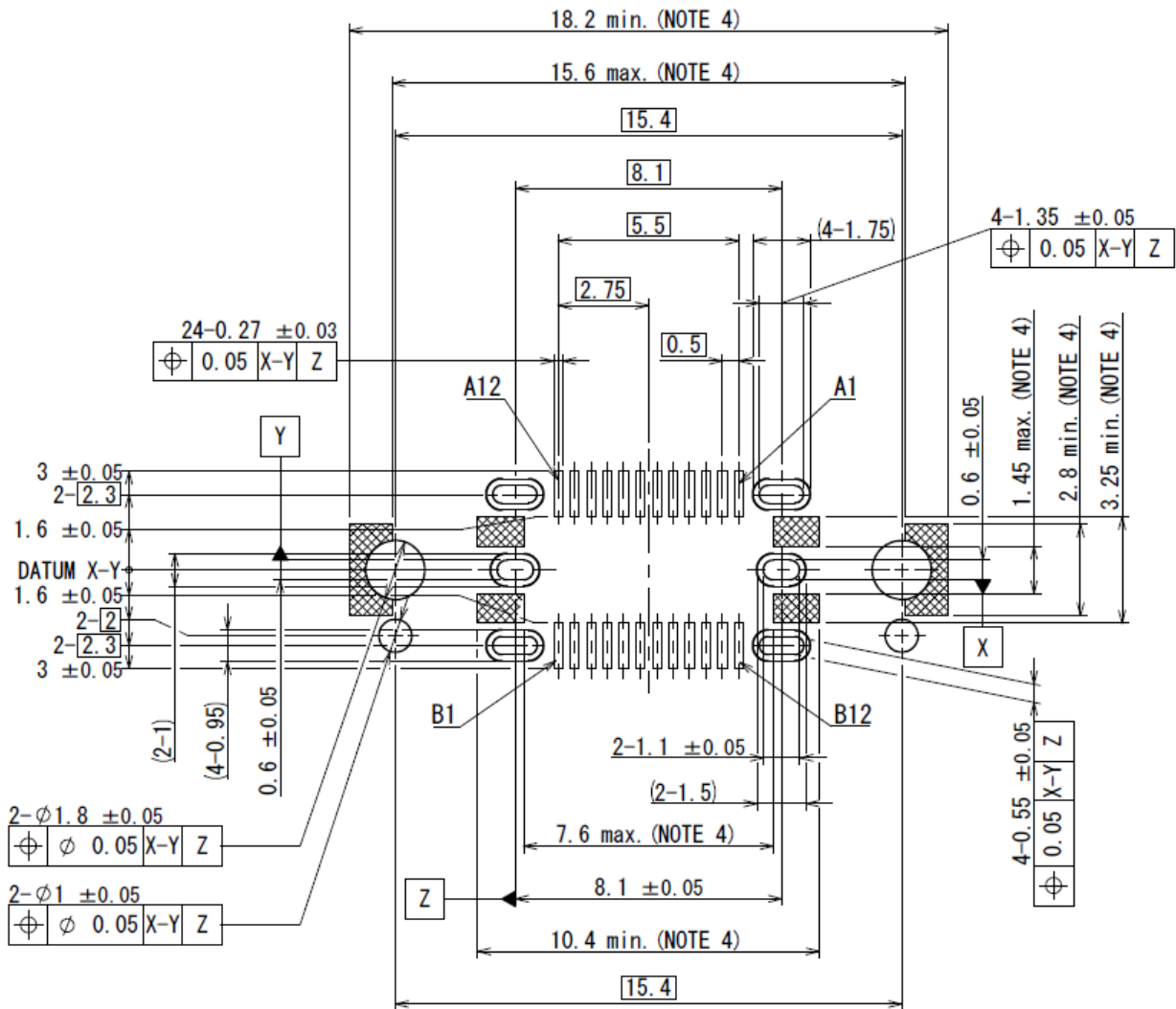


<When Mated>



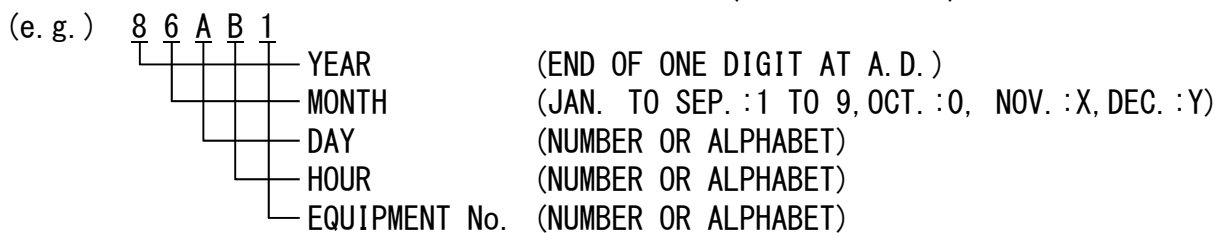
Recommended PCB Layout

Unit: mm



NOTE 1. TERMINAL COPLANARITY IS 0.1 MAX.

NOTE 2. PRODUCTION LOT NUMBER IS MARKED AS INDICATED. (LASER MARKING)



NOTE 3. VACUUM AREA.

NOTE 4. STENCIL MASK OPENING PROHIBITION AREA.

NOTE 5. THE PACKING METHOD SHALL BE AS SPECIFIED IN SJ119573.

NOTE 6. THIS PRODUCT IS MATING COMPATIBLE WITH TYPE C RECEPTACLE, BUT IS NOT COMPLIANT WITH USB TYPE C SPECIFICATION.

NOTE 7. PIN ASSIGNMENT (FRONT VIEW)

Pin No.	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1
	GND	RX2+	RX2-	V <sub>BUS</sub>	SBU1	D-	D+	CC	V <sub>BUS</sub>	TX1-	TX1+	GND
Pin No.	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12
	GND	TX2+	TX2-	V <sub>BUS</sub>	V <sub>conn</sub>			SBU2	V <sub>BUS</sub>	RX1-	RX1+	GND

NOTE 8. METAL MASK OPENING RATE OF THE SMT TERMINAL SHOULD BE SET UP WITH 100%.

**Notice:**

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.
  - (1) Applications that require consultation:
    - (i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:  
Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.
    - (ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :  
Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.
  - (2) Recommended applications include:  
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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