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 ø1.6mm 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**

- Number of Contacts: 24 pos.
- Contact Resistance: 40mΩ max.(initial)
- Dielectric Withstanding Voltage: 100Vrms / 1 minute
- Insulation Resistance: 100MΩ min.(initial)
- Rated Current:
  - \( V_{BUS} \) (Terminal No. A4, A9, B4, B9) DC 5A (Total)
  - GND (Terminal No. A1,A12,B1,B12) DC 6.25A (Total)
  - \( V_{CONN} \) (Terminal No. B5) DC 1.25A
  - Others: DC 0.25A / pin
- Rated Voltage: 20Vrms
- Mating Durability: 10,000 times
- Operating Temperature: -30 Deg. C to +80 Deg. C

*Plug will be packaged with protective cap on.

Protective Cap

*Plug will be packaged with protective cap on.

Protective Cap
Materials and Finishes

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

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

Ordering Information

[Plug Side] **DX07 VN 24 WA 2 C**

Series
- DX07: USB Type C
- V: Vertical Plug

Modification Code
- A: Contact area: Au plating over Ni
- DX07VN24WA2: (Individual Connector)
- DX07VN24WA2C1568: (Tray Supplied Product)

No. of Contacts: 24 pos.

Mounting Type: Straight SMT

<table>
<thead>
<tr>
<th>Plug</th>
<th>Part Number</th>
<th>Drawing No.</th>
<th>Specifications</th>
</tr>
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<tbody>
<tr>
<td>Vertical Plug</td>
<td>DX07VN24WA2 (Individual Connector)</td>
<td>SJ119572</td>
<td>JACS-30353-12</td>
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<tr>
<td></td>
<td>DX07VN24WA2C1568 (Tray Supplied Product)</td>
<td>SJ119573</td>
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Note) Please order in tray units.
NOTE 1. TERMINAL COPLANARITY IS 0.1 MAX.
NOTE 2. PRODUCTION LOT NUMBER IS MARKED AS INDICATED. (LASER MARKING)
   (e.g.) 86AB1
   YEAR (END OF ONE DIGIT AT A.D.)
   MONTH (JAN. TO SEP.: 1 TO 9, OCT.: 0, NOV.: X, DEC.: Y)
   DAY (NUMBER OR ALPHABET)
   HOUR (NUMBER OR ALPHABET)
   EQUIPMENT No. (NUMBER OR ALPHABET)

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)

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>GND</td>
<td>RX2+</td>
<td>RX2-</td>
<td>VBUS</td>
<td>SBU1</td>
<td>D-</td>
<td>D+</td>
<td>CC</td>
<td>VBUS</td>
<td>TX1-</td>
<td>TX1+</td>
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<table>
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<tr>
<th>Pin No.</th>
<th>B1</th>
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<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>B7</th>
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<th>B11</th>
<th>B12</th>
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<td>TX2-</td>
<td>VBUS</td>
<td>Vconn</td>
<td>SBU2</td>
<td>VBUS</td>
<td>RX1-</td>
<td>RX1+</td>
<td>GND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.