

USB Type-C® Compatible DX07 Series USB4® 40Gbps Right Angle Receptacle

CONNECTOR
MB-0362-5
Oct.2022

RoHS Compliant



Overview

The DX07 Series connectors are USB Type-C® compatible connectors which are used in various consumer and industrial devices which require a power and serial data interface. These products are USB4 40Gbps certified receptacle connectors which can support data rates up to 40Gbps. New features introduced with the USB4 specification such as tunneling of various signals is also supported. Specific variants are also Thunderbolt™ 4 certified.

Applicable Markets

PCs, tablets, VR / AR headsets, gaming consoles, docking stations and SSDs

Note) USB4®, USB Type-C®, USB-C® are trademarks of USB Implementers Forum.
Thunderbolt™ is a trademark of Intel Corporation.

Features

- Compliant with Universal Serial Bus Type-C Specification Release 2.1
- USB4 40Gbps (Gen 3) certified.
- Supports 240W (5A/48V) max. power supply.
(Compatible with USB Power Delivery Extended Power Range)
- Optimized contact design for superior Signal Integrity performance.

Remarks: Large selection of connector variations are available in DX07 Series
Please refer to the chart below for brochures of other variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0336-* | DX07 Vertical Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |

Note: The asterisk (*) stands for revision number.

General Specifications

| | |
|---------------------------------|---------------------|
| Number of Contacts | 24 Position |
| Contact Resistance | 40mΩ max. (initial) |
| Dielectric Withstanding Voltage | 100Vrms / 1minute |
| Insulation Resistance | 100MΩ (initial) |
| Durability | 10,000 times |
| Operating Temperature Range | -40°C ~ +85°C |

| | |
|---------------|---|
| 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 | 48Vrms |

Ordering Information

DX07 * * 24 * * * R****

Series
DX07: USB Type C

Reeled pcs. / reel

S: On-board, B: Mid-mount

Modification Code #2

Modification Code #1

Plating Specification
Contact area: Au plating over Ni

No. of Contacts: 24 pos.

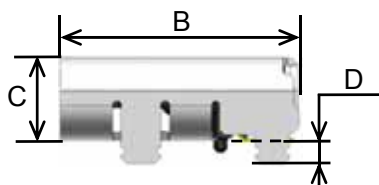
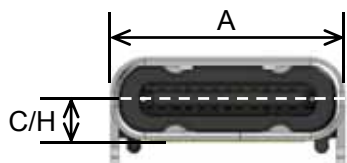
Board Connection Type
J: SMT Type
X: Hybrid Type

TID Number


| Part Number | TID Number | Thunderbolt 4 Certification |
|-------------|------------|-----------------------------|
| DX07S024JAA | 4729 | Certified |
| DX07B024JAA | 5067 | Certified |
| DX07BD24JJ4 | 5362 | - |
| DX07S024XJ4 | 7420 | - |
| DX07S024XA8 | 8315 | - |

Outer Dimensions

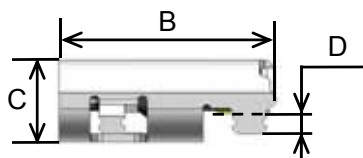
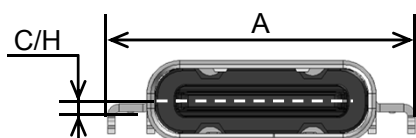
On-board





Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length |
|---|------|-------------|-------------|-------------|-------------|---------------|
| DX07S024JAA  | 1.57 | 8.94 | 9.17 | 3.14 | 0.9 | 5.5 |

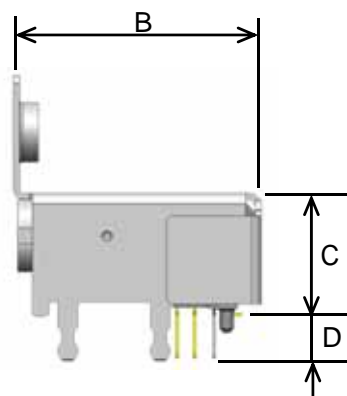
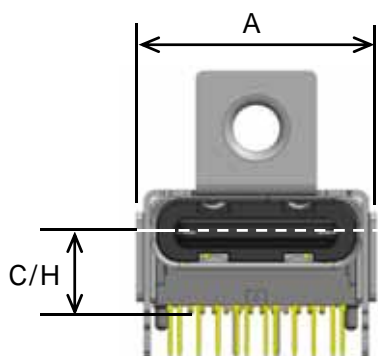
Mid-mount





Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length |
|---|------|-------------|-------------|-------------|-------------|---------------|
| DX07B024JAA  | 0.47 | 12.00 | 8.37 | 3.14 | 0.8 | 4.7 |
| DX07BD24JJ4  | -0.1 | 12.75 | 10.35 | | | 5 |

On-board, Hybrid



Unit : mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length | Note |
|---|-----|-------------|-------------|---------------------------------|----------------------------------|---------------|------------------|
| DX07S024XJ4  | 3.4 | 10.0 | 10.44 | Flange 10.17 Body 5.17 | Bracket 1.9 Contact 1.8 | 4.7 | Screw-hole M2 |
| DX07S024XA8  | | | 10.25 | 5.17 | | | - |

| |
|---------------------|
| Technical Documents |
|---------------------|

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|------------------|----------------------|----------------|-----------------------|------------------|
| DX07S024JAAR1100 | SJ122841 SJ122842 | JACS-30353-35 | JAHL-30353-9 | 1,100 per reel |
| DX07B024JAAR1100 | SJ122843 SJ122844 | | | |
| DX07BD24JJ4R1100 | SJ122944 SJ122945 | JACS-30353-36 | JAHL-30353-7 | |
| DX07S024XJ4R250 | SJ119851 SJ119852 | JACS-30361 | JAHL-30361-1 | 250 per reel |
| DX07S024XA8R700 | SJ121226 SJ121227 | | | 700 per reel |

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.

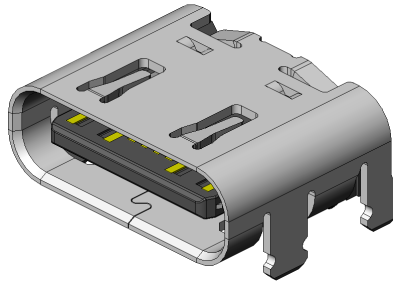
Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

USB Type-C® Compatible DX07 Series 16-position Right Angle Receptacle

CONNECTOR
MB-0350-3
Aug 2025

RoHS Compliant



The DX07 Series are USB Type-C® compliant connectors ideally suited for use in various devices, such as PCs, smartphones, audio-visual equipment, gaming devices, and other hand-held devices.

This product is a receptacle with 1 row of SMT terminals, ideal for saving space to allow for the miniaturization of devices.

Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Applications

Smartphones, tablets, power bank, headphones, charging adapter and others

Features

- Compatible with USB Type-C Specification Release 2.4
- Supports 240W (5A/48V) max. power supply.
(Compatible with USB Power Delivery Extended Power Range)
- USB 2.0 (480Mbps)
- Reversible plug design
- Lock structure with superior durability.

Remarks: Large selection of connector variations are available in DX07 Series
Please refer to the chart below for brochures of other variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0336-* | DX07 Vertical Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |

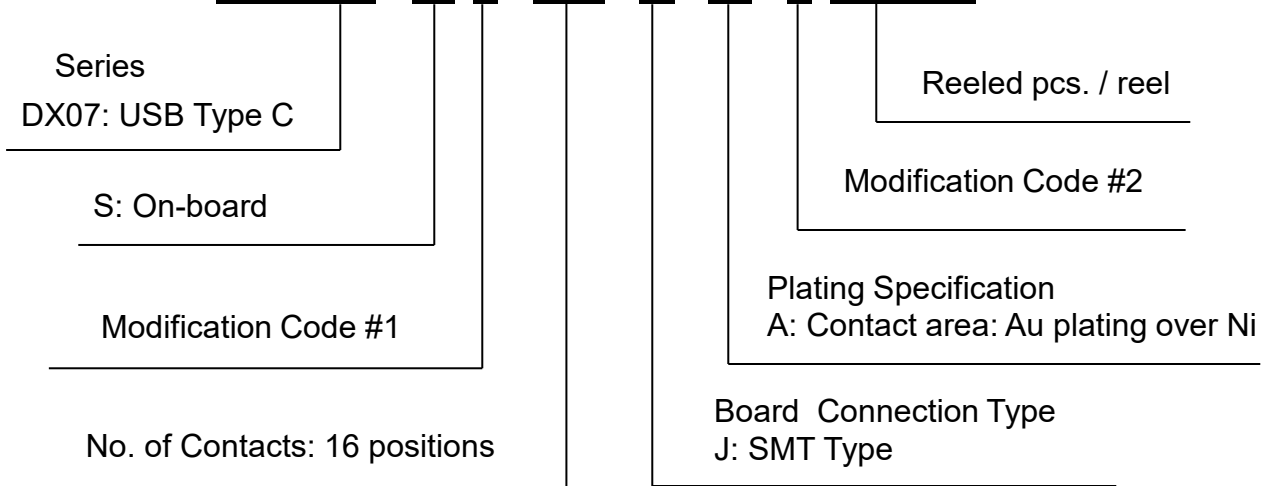
Note: The asterisk (*) stands for revision number.

General Specifications

| | | | |
|--|--------------------------|---------------|---|
| Number of Contacts | 16 Position | Rated Current | V _{BUS} (Terminal No. A4, A9, B4, B9) DC 5 A (Total) |
| Contact Resistance | 40 mΩ max. (initial) | | GND (Terminal No. A1, A12, B1, B12) DC 6.25 A (Total) |
| Withstanding Dielectric Withstanding Voltage | 100 Vr.m.s. (per minute) | | V _{CONN} (Terminal No. B5) DC 1.25 A |
| | | | Others DC 0.25 A |
| Insulation Resistance | 100 MΩ (initial) | Rated Voltage | 48 Vr.m.s. |
| Durability | 10,000 times | | |
| Operating Temperature Range | -40 deg.C to +85 deg.C | | |

Ordering Information

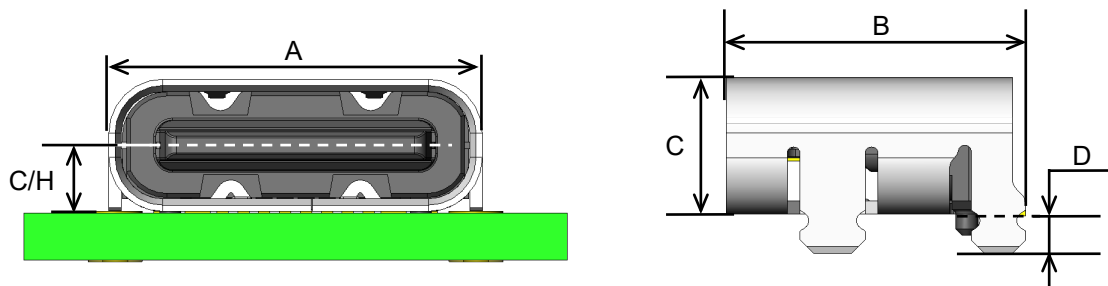
DX07 * * 16 J A * R****



TID No.

| Part Number | TID No. |
|------------------|---------|
| DX07S016JA1R1500 | 2685 |
| DX07S016JA2R1500 | 11451 |
| DX07S016JA3R1500 | 10724 |

Outer Dimensions



Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length |
|----------------------------|------|-------------|-------------|-------------|-------------|---------------|
| DX07S016JA1 DX07S016JA2 | 1.58 | 8.94 | 6.9 | 3.16 | 0.9 | 4.7 |
| DX07S016JA3 | | | | | 1.2 | |

Part Numbers and Product Drawings

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|------------------|----------------------|----------------|-----------------------|------------------|
| DX07S016JA1R1500 | SJ121836 SJ121837 | JACS-30413 | JAHL-30413 | 1,500 |
| DX07S016JA2R1500 | SJ122103 SJ122104 | JACS-30412 | JAHL-30412 | |
| DX07S016JA3R1500 | SJ122205 SJ122206 | JACS-30413 | JAHL-30413 | |

Notice:

- 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.
- 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.
- 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.
 - Applications that require consultation:
 - 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.
 - 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.
 - Recommended applications include:
Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

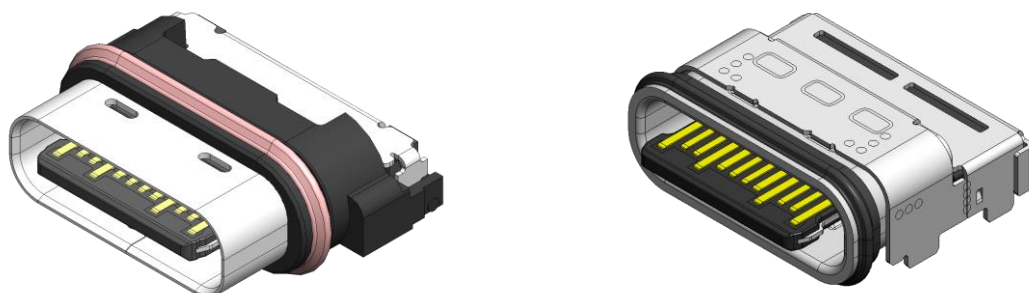
USB Type-C® Compatible DX07 Series Waterproof Receptacle

CONNECTOR

MB-0333-7

Sep.2024

RoHS Compliant



Overview

The waterproof DX07 Series connectors are the connector that is mating compatible with USB Type-C® and have become a popular standard interface for personal computers, mobile devices, audiovisual equipment, and portable gaming devices.

It is an individually waterproof receptacle connector which provides a solution to the ever growing trend of waterproofing portable devices.

Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Application

Smartphones, tablets, waterproof speakers, Bluetooth earphones / headphones, action camera, VR / AR headset, and others

Features

- Waterproof performance rating of IPX7 or higher
- Supports 240W (5A/48V) max. power supply.
(Compatible with USB Power Delivery Extended Power Range)
- Symmetric interface which allows for the plug to be inserted upside down or right side up
- Lock structure with superior durability

Remarks: Large selection of other connector variations available in DX07 Series
Please refer to the chart below for brochures.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0336-* | DX07 Vertical Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |

Note: The asterisk (*) stands for revision number.

General Specifications

| | | | |
|---------------------------------|--|---------------|---|
| Number of Contacts | 24 positions | Rated Current | V _{BUS} (Terminal No. A4, A9, B4, B9) DC 5A (Total) |
| Contact Resistance | 40mΩ max. (initial) | | GND (Terminal No. A1, A12, B1, B12) DC 6.25A (Total) |
| Dielectric Withstanding Voltage | 100Vr.m.s. (per minute) | | V _{CONN} (Terminal No. B5) DC 1.25A |
| Insulation Resistance | 100MΩ (initial) | | Others are DC 0.25A/pin |
| Mating Durability | 10,000 times | Rated Voltage | 48Vr.m.s |
| Operating Temperature | -30 deg. C to +85deg. C (DX07W024JA3/DX07W024JA2) -30 deg. C to +80deg. C (DX07WH24JA3) | | |

Waterproof Performance

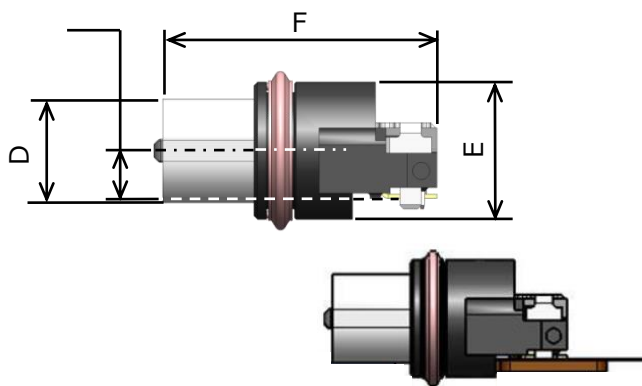
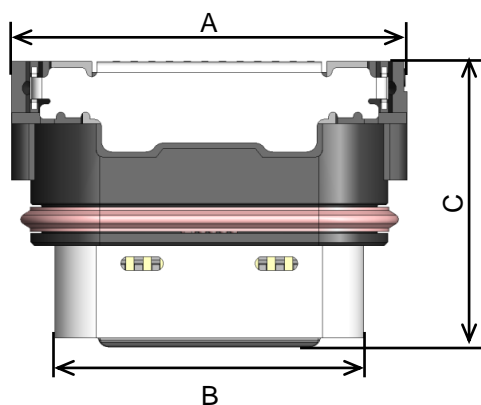
| Part Number | Waterproof Rating | |
|-------------|-------------------|---|
| DX07W024JA3 | IPX8 | Protection from submersion of 1.5m depth for 30 minutes |
| DX07W024JA2 | | |
| DX07WH24JA3 | IPX7 | Protection from submersion of 1.0m depth for 30 minutes |

Ordering Information

DX07 W * 24 J A * R****

| | |
|---------------------------------|--|
| Series DX07: USB Type C | Reeled pcs. / reel |
| W: Waterproof Receptacle | Modification Code: #2 |
| Modification Code: #1 | Plating Specification A: Contact area: Au plating over Ni |
| Number of Contacts: 24 position | Board Connection Type J: 2 row, SMT type |

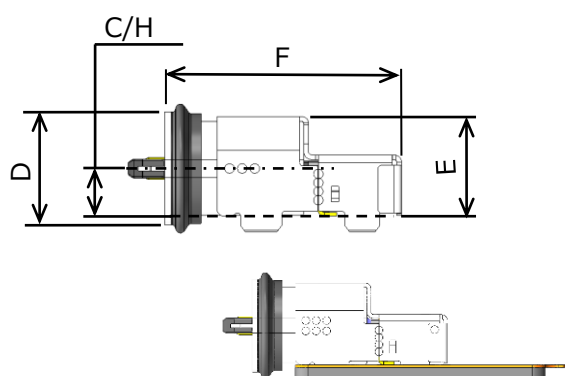
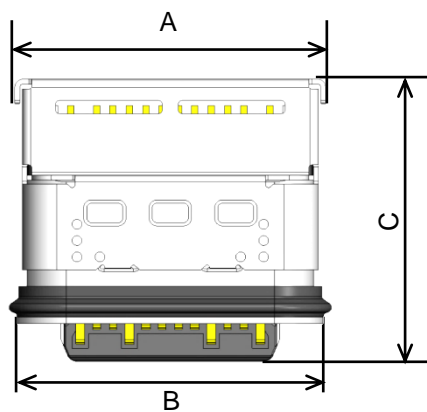
Outer Dimensions



Mated condition
(Please refer to attention on next page)

Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E | Dimension F | Mating Length |
|-------------|------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| DX07W024JA3 | 1.35 | 11.2 | 8.74 | 8.05 | 2.94 | 3.9 | 7.8 | 4.2 |
| DX07W024JA2 | | | | | | | 6.2 | 2.6 |



Mated condition

Unit: mm

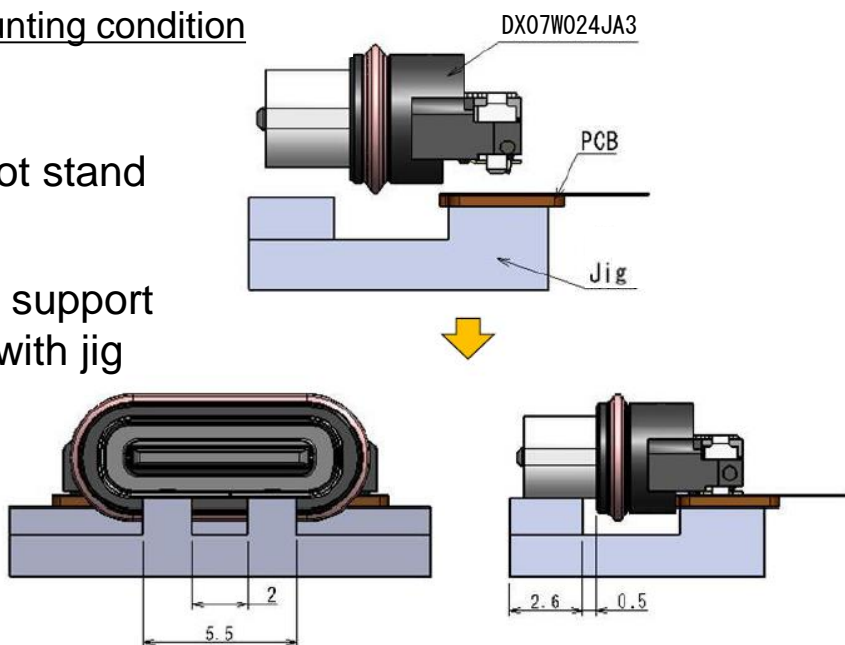
| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E | Dimension F | Mating Length |
|-------------|-----|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| DX07WH24JA3 | 1.5 | 9.5 | 9.35 | 8.65 | 3.56 | 3.13 | 7.50 | 3.3 |

Recommended board mounting condition

Attention

DX07W024JA3/2 cannot stand on its own.

When mounting please support connector mating side with jig so it will not fall over.



Technical Documents

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|---------------------------------|----------------------|----------------|-----------------------|-------------------|
| DX07W024JA3 DX07W024JA3R1000 | SJ122198 SJ122199 | JACS-30398 | J AHL-30398 | 1,000 pieces/reel |
| DX07W024JA2 DX07W024JA2R1000 | SJ119766 SJ119767 | | | 1,000 pieces/reel |
| DX07WH24JA3 DX07WH24JA3R1200 | SJ120981 SJ120982 | JACS-30353-24 | --- | 1,200 pieces/reel |

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.

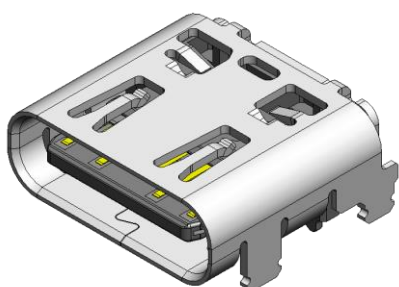
Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

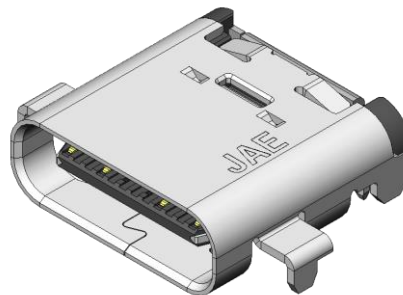
USB Type-C® Compatible DX07 Series SMT Contact Right Angle Receptacle

CONNECTOR
MB-0297-12
Dec. 2024

RoHS Compliant



On-board Type



Mid-mount Type

Overview

The DX07 Series connectors are USB Type-C compliant and have become a popular standard interface for personal computers, smartphones, mobile devices, audiovisual equipment, and portable gaming devices.

In addition, due to the progress of in-vehicle infotainment (IVI) and higher functionality of vehicles, the USB Type-C interface is being adopted as a user interface connection with consumer devices. It is able to support higher data rates and faster charging compared to other interfaces.

This product is a 2-row SMT type receptacle connector with a mounting area space-saving design.

Specific products have been tested to automotive specifications.

Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Application

Smartphones, tablets, PCs, digital still cameras, headphones, and others

Features

- Compliant with Universal Serial Bus Type-C Specification Release 2.4
- Compatible with 10Gbps x2 (20Gbps) Super Speed communication. (USB 3.2)
- Supports 240W (5A/48V) maximum power supply.
(Compatible with USB Power Delivery Extended Power Range)
- Reversible plug orientation makes possible to insert both ways up.
- Lock structure with superior durability.

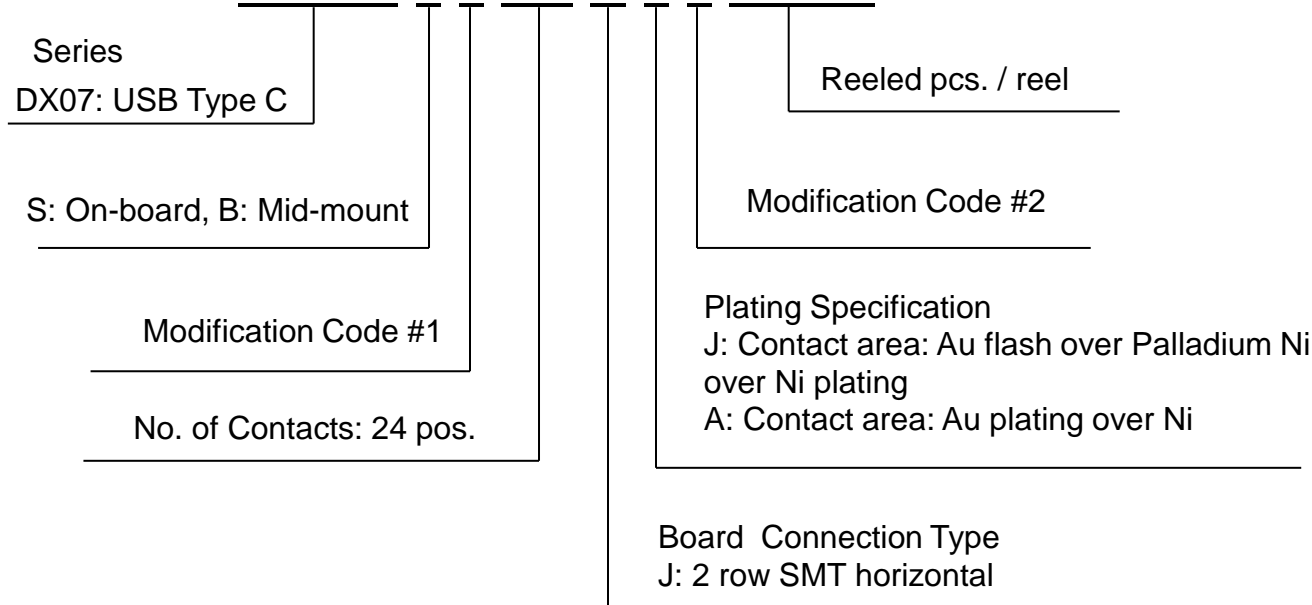
*Not compatible with IATF.

General Specifications

| | |
|---------------------------------|---|
| Number of Contacts | 24 Positions |
| 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 |
| Rated Voltage | 48Vr.m.s. |
| Contact Resistance | 40mΩ max. (initial) |
| Dielectric Withstanding Voltage | 100Vr.m.s. (per minute) |
| Insulation Resistance | 100MΩ (initial) |
| Durability | 10,000 times |
| Operating Temperature | -40 deg. C to +85 deg. C (general products) -40 deg. C to +125 deg. C (for products evaluated to automotive specifications, including temperature rise when energized) |

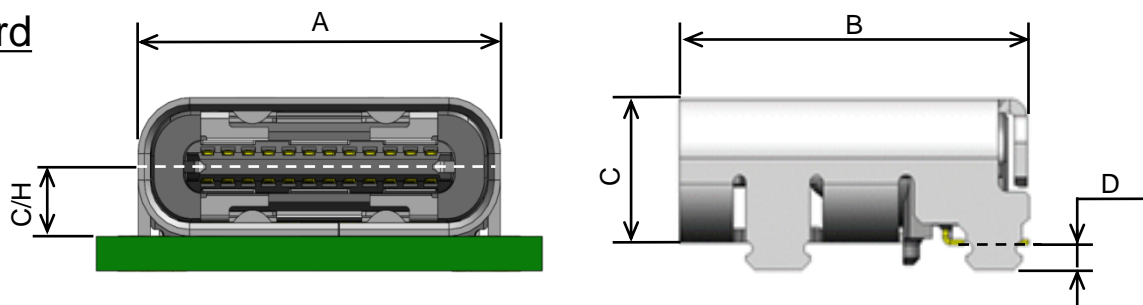
Ordering Information

DX07 * * 24 J * * R****



Outer Dimensions

On-board



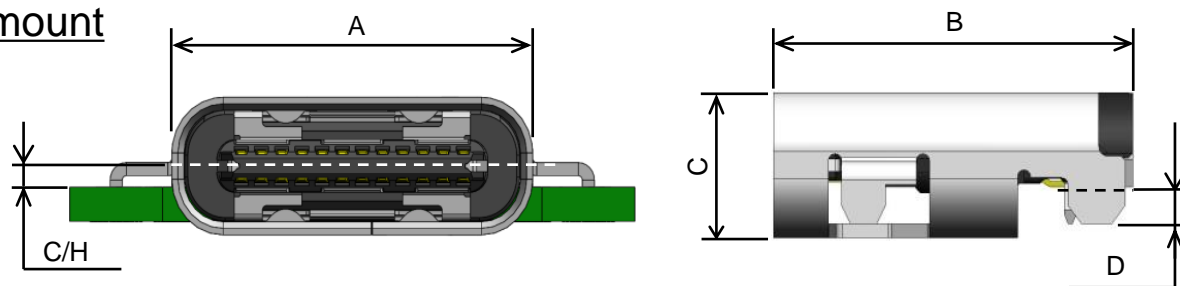
*Products compatible with automotive specification tests.

Unit: mm



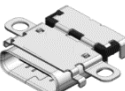
| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length | Rear Shield | Note | | |
|--------------|------|-------------|-------------|-------------|---------------------------|---------------|-------------|-------------|-----|-----|
| DX07S024JA1* | 1.57 | 8.94 | 8.17 | 3.14 | 0.6 | 4.7 | Yes | Insert mold | | |
| DX07S024JA2* | | | | | 1.2 | | | | | |
| DX07S024JJ1 | | | | | Shell 2-point contact DIP | | | | | |
| DX07S024JJ2 | | | | | 0.6 | | No | --- | | |
| DX07S024JJ3 | | | | | 1.2 | | | --- | | |
| DX07S024JJ7 | | | | | 0.9 | | | 5.5 | Yes | --- |
| DX07S024JJ4 | | | | | 2.0 | | 8.57 | 0.6 | 5.1 | --- |

Outer Dimensions

Mid-mount



Unit: mm

| Part Number | | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Rear Shield | Note |
|-------------|--|-------|-------------|-------------|-------------|-------------|-------------|------|
| DX07B024JJ1 |  | 0.47 | 8.94 | 8.17 | 3.14 | 0.8 | Yes | -- |
| DX07B024JJ2 |  | | | | | | No | -- |
| DX07BN24JA2 |  | -0.64 | 9.27 | 11.1 | 3.6 | 0.8 | No | -- |

Part Numbers and Product Drawings

On-board

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|--|----------------------------------|--|-----------------------|---|
| DX07S024JA1 DX07S024JA1R300 DX07S024JA1R1300 | SJ119361 SJ121696 SJ119362 | JACS-30353-19 (General specification) | JAHL-30353-5 | 300 pieces/reel (Note) 1,300 pieces/reel |
| DX07S024JA2 DX07S024JA2R1200 | SJ121711 SJ121712 | JACS-30503 (Automotive spec tested product) | | 1,200 pieces/reel |
| DX07S024JJ1 DX07S024JJ1R1300 | SJ115848 SJ115849 | JACS-30353 | JAHL-30353-1 | 1,300 pieces/reel |
| DX07S024JJ2 DX07S024JJ2R1300 | SJ115946 SJ115947 | | | |
| DX07S024JJ3 DX07S024JJ3R1300 | SJ115994 SJ115995 | | | |
| DX07S024JJ4 DX07S024JJ4R1300 | SJ117264 SJ117265 | | | |
| DX07S024JJ7 DX07S024JJ7R1200 | SJ119223 SJ119224 | | | 1,200 pieces/reel |
| DX07SD24JJ3 DX07SD24JJ3R1100 | SJ117525 SJ117526 | | | 1,100 pieces/reel |

Note) 300 pieces/reel package quantity are available as samples only.

Part Numbers and Product Drawings

Mid-mount

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|---------------------------------|----------------------|----------------|-----------------------|-------------------|
| DX07B024JJ1 DX07B024JJ1R1500 | SJ115850 SJ115851 | JACS-30353 | JAHL-30353-1 | 1,500 pieces/reel |
| DX07B024JJ2 DX07B024JJ2R1500 | SJ115996 SJ115997 | | | |
| DX07BN24JA2 DX07BN24JA2R1300 | SJ119577 SJ119578 | | | 1,300 pieces/reel |

Remarks: Large selection of connector variations are available in DX07 Series
Please refer to the chart below for brochures of other variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0336-* | DX07 Vertical Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0332-* | DX07 Vertical Plug |
| MB-0324-* | DX07 Harness |

Note: The asterisk (*) stands for revision number.

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.

Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

USB Type-C® Compatible DX07 Series Hybrid Contact Receptacle

CONNECTOR

MB-0335-5

December 2021

RoHS Compliant

On-board TypeMid-mount Type

The DX07 Series connectors are USB Type-C® compliant, and they are a standard interface for various devices, such as PCs, smartphones, audio-visual equipment, gaming devices, and other hand-held devices.

This product is a through-hole, SMT hybrid contact receptacle which allows for reworking of soldering area.

Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Applicable Markets

PCs, tablets, HUBs, POS registers, portable gaming devices, and others

Features

- Compliant with Universal Serial Bus Type-C Specification Release 2.1
- Compatible with 10Gbps x2 (20Gbps) Super Speed communication. (USB 3.2)
- Supports 240W (5A/48V) max. power supply.
(Compatible with USB Power Delivery Extended Power Range)
- Lock structure with superior durability.

Remarks: Large selection of connector variations are available in DX07 Series
Please refer to the chart below for brochures of other variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0336-* | DX07 Vertical Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |

Note: The asterisk (*) stands for revision number.

General Specifications

| | |
|---------------------------------|---------------------|
| Number of Contacts | 24 Position |
| Contact Resistance | 40mΩ max. (initial) |
| Dielectric Withstanding Voltage | 100Vrms / 1minute |
| Insulation Resistance | 100MΩ (initial) |
| Durability | 10,000 times |
| Operating Temperature Range | -40°C ~ +85°C |

| | |
|---------------|--|
| 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 | 48Vrms |

Ordering Information

DX07 * * 24 X * * R****

Series
DX07: USB Type C

S: On-board, B: Mid-mount

Modification Code #1

No. of Contacts: 24 positions

Reeled pcs. / reel

Modification Code #2

Plating Specification

J: Contact area: Au flash over Palladium
Ni over Ni plating

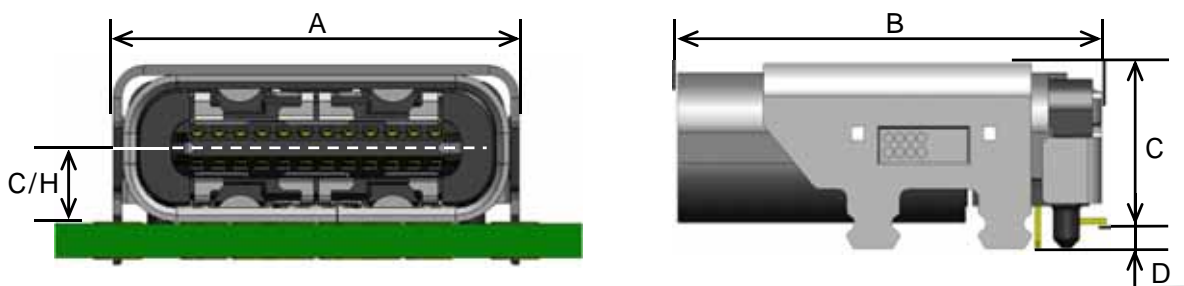
A: Contact area: Au over Ni plating

Board Connection Type

X: Hybrid Type

Outer Dimensions

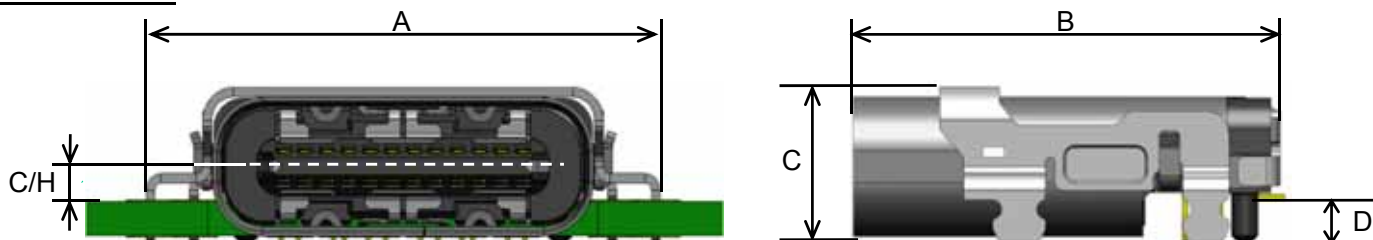
On-board



Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length | Shell Plating | Note |
|--------------|-----|-------------|-------------|---------------------------|----------------------------|---------------|---------------|---------------|
| DX07S024XJ1 | 1.6 | 9.4 | 9.65 | 3.34 | 0.7 | 5.5 | Black Nickel | -- |
| DX07S024XJ1A | | | | | Bracket 0.9 Contact 0.7 | | | |
| DX07SA24XJ2 | 2.0 | 10.5 | 9.25 | 3.77 | 0.9 | 5.1 | Nickel | -- |
| DX07S024XJ4 | 3.4 | 10.0 | 10.44 | Flange 10.17 Body 5.17 | Bracket 1.9 Contact 1.8 | 4.7 | | Screw-hole M2 |
| DX07S024XA8 | | | | 10.25 | | | | 5.17 |

Mid-mount



Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Mating Length | Shell Plating | Note |
|-------------|-----|-------------|-------------|-------------|-------------|---------------|---------------|------|
| DX07B024XJ1 | 0.7 | 11.8 | 9.65 | 3.14 | 0.9 | 5.5 | Black Nickel | -- |

| |
|---------------------|
| Technical Documents |
|---------------------|

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|-----------------------------------|----------------------|----------------|-----------------------|-------------------|
| DX07B024XJ1 DX07B024XJ1R1300 | SJ116121 SJ116122 | JACS-30361 | JAHL-30361 | 1,300 pieces/reel |
| DX07S024XJ1 DX07S024XJ1R1100 | SJ116123 SJ116124 | | | 1,100 pieces/reel |
| DX07S024XJ1A DX07S024XJ1AR1000 | SJ117695 SJ117696 | | | 1,000 pieces/reel |
| DX07SA24XJ2 DX07SA24XJ2R1000 | SJ116666 SJ116667 | | | |
| DX07S024XJ4 DX07S024XJ4R250 | SJ119851 SJ119852 | | | 250 pieces/reel |
| DX07S024XA8 DX07S024XA8R700 | SJ121226 SJ121227 | | | 700 pieces/reel |

Note) Please order in reel units.

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.

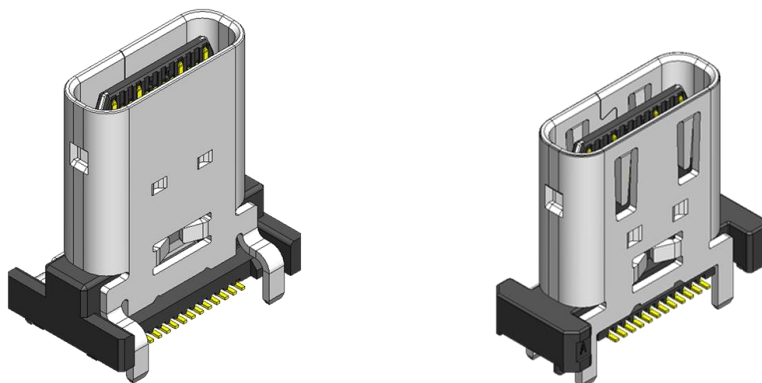
Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

USB Type-C® Compatible DX07 Series Vertical Receptacle

CONNECTOR
MB-0336-6
Jul.2025

RoHS Compliant



On-board Type

The DX07 Series are USB Type-C® compliant connectors ideally suited for use in various devices, such as PCs, smartphones, audio-visual equipment, gaming devices, and other hand-held devices.

This product is a vertical type receptacle ideal for monitors and other peripheral devices.
Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Application

Monitors, hubs, wall outlets, USB chargers, printers, POS terminal, and others

Features

- Compliant with Universal Serial Bus Type-C Specification Release 2.1.
- Compatible with 10Gbps x2 (20Gbps) Super Speed communication. (USB 3.2)
- Supports 240W (5A/48V) max. power supply.
(Compatible with USB Power Delivery Extended Power Range)
- Reversible plug orientation makes possible to insert both ways up.
- Lock structure with superior durability.

Remarks: Large selection of connector variations are available in DX07 Series
Please refer to the chart below for brochures of other variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |

Note: The asterisk (*) stands for revision number.

General Specifications

| | |
|---------------------------------|-------------------------|
| Number of Contacts | 24 Position |
| Contact Resistance | 40 mΩ max. (initial) |
| Dielectric Withstanding Voltage | 100 Vr.m.s.(per minute) |
| Insulation Resistance | 100 MΩ (initial) |
| Durability | 10,000 times |
| Operating Temperature Range | -40 deg.C to +85 deg.C |

| | |
|---------------|---|
| 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 |
| Rated Voltage | 48 Vr.m.s. |

Ordering Information

[Receptacle Side]

DX07 S * 24 W * * R****

Series

DX07: USB Type C

Reeled pcs. / reel

Modification Code #2

S: On-board

Plating Specification

J: Contact area:

Au flash over Palladium Ni over Ni plating

A: Contact area:

Ni over Au plating

Modification Code #1

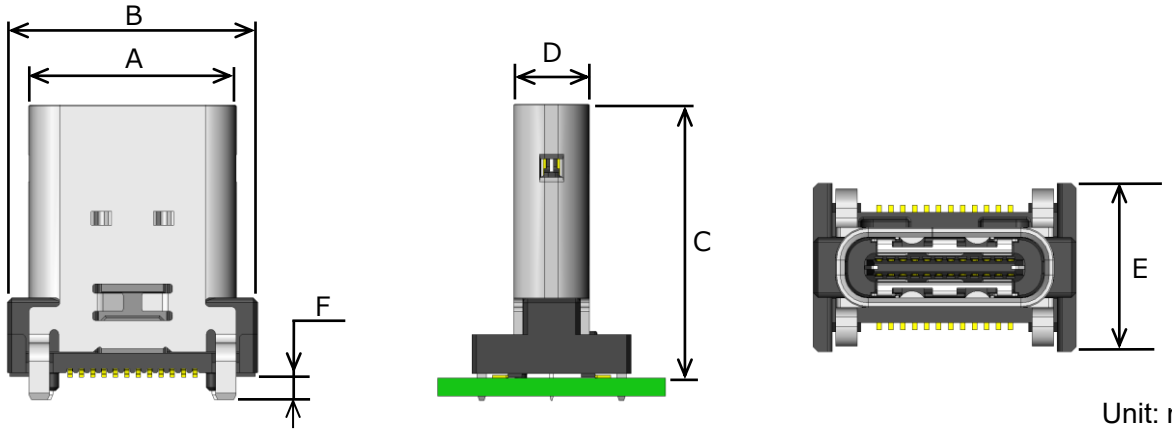
No. of Contacts: 24 pos.

Board Connection Type

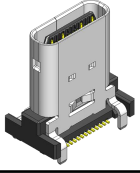
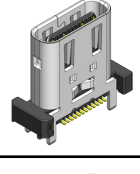
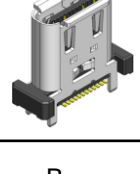
W: Vertical Type

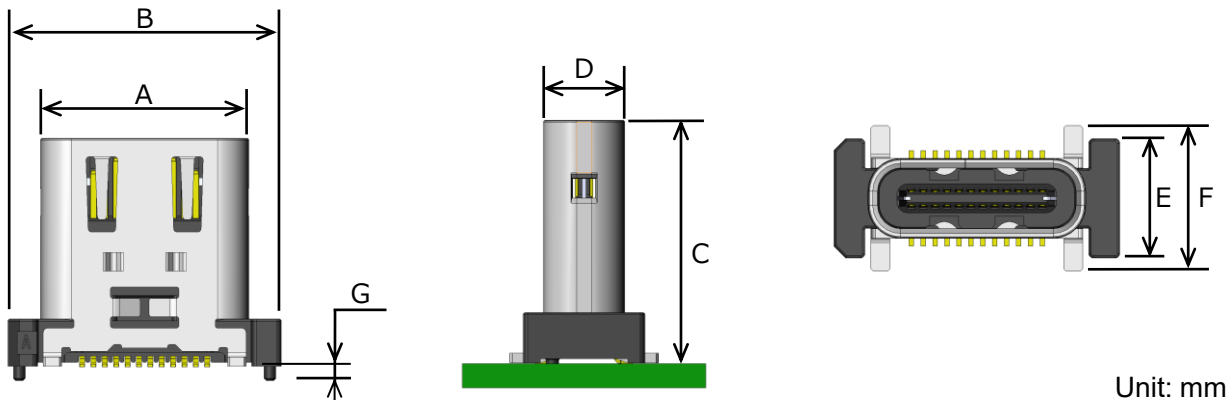
Outer Dimensions

On-board

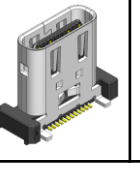


Unit: mm

| Part Number | | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E | Dimension F | Mating Length | Ground Connection |
|------------------------------------|---|-------------|-------------|-------------|-------------|-------------|-------------|---------------|-------------------|
| DX07S024WJ1 |  | 9.14 | 11.0 | 12.0 | 3.34 | 7.0 | 1.0 | 4.7 | Ground plate |
| DX07S024WJ3 |  | | 12.0 | 10.0 | | 5.0 | 1.8 | 5.0 | Shell spring |
| DX07S024WA7 (With mating guide) |  | | | | | | | | |



Unit: mm

| Part Number | | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E | Dimension F | Dimension G | Mating Length | Features |
|-------------|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|----------|
| DX07S024WJ4 |  | 9.14 | 12.0 | 10.0 | 3.34 | 5.0 | 6.1 | 0.6 | 5.0 | ALL SMT |

Part Numbers and Product Drawings

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|--------------------------------|----------------------|----------------|-----------------------|------------------|
| DX07S024WJ1 DX07S024WJ1R350 | SJ117219 SJ117220 | JACS-30368 | J AHL-30368 | 350 pieces/reel |
| DX07S024WJ3 DX07S024WJ3R400 | SJ117928 SJ117929 | | | 400 pieces/reel |
| DX07S024WJ4 DX07S024WJ4R450 | SJ121804 SJ121805 | | | 450 pieces/reel |
| DX07S024WA7 DX07S024WA7R350 | SJ130549 SJ130550 | | | 350 pieces/reel |

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.

Japan Aviation Electronics Industry, Limited

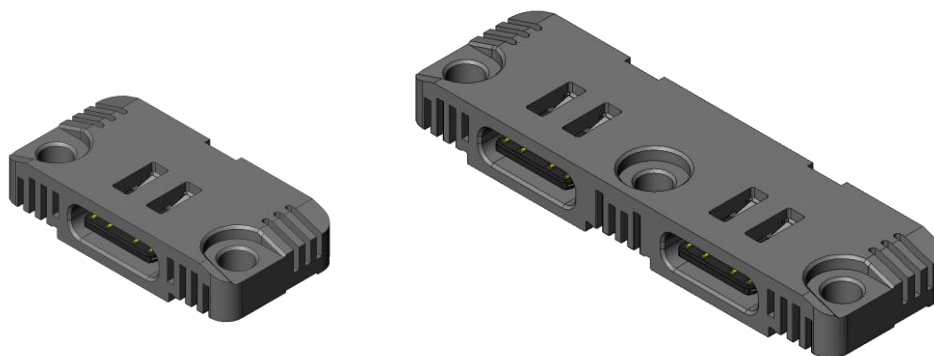
* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

DX07 Series: USB Type-C® Connectors

New Repairable Receptacle

CONNECTOR
MB-0410-1
Jan.2026

RoHS Compliant



The DX07 Series are USB Type-C® compliant connectors designed for a wide range of devices, including PCs, smartphones, audio-visual equipment, gaming consoles, and other handheld electronics.

With the growing emphasis on sustainable product design, driven by regulations such as the EU's Ecodesign for Sustainable Products Regulation (ESPR) and the French Repairability Index, manufacturers are increasingly required to prioritize repairability and reusability.

To meet these demands, JAE has developed a compression-type receptacle connector that significantly enhances repairability. Unlike conventional SMT-mounted connectors, this design allows the connector to be replaced without using specialized tools and techniques for desoldering components. independently of the main board. A screwdriver is all that's needed for replacement, reducing waste and simplifying maintenance.

Note) USB Type-C®, USB-C® are trademarks of USB Implementers Forum.

Applications

Laptops, monitors, docking stations, and other general PC peripherals

Features

- Solderless connection via compression coupling with gold-plated board pads
- Easy replacement without specialized tools
- Durable MIM shell structure for impact resistance
- Compliant with USB Type-C Specification Release 2.4.
- Supports USB4 Version 2.0 (40 Gbps x 2)
- Compatible with USB PD EPR (up to 240W at 5A/48V)
- Reversible plug orientation for user convenience.

General Specifications

| | |
|---------------------------------|---------------------------|
| Number of Contacts | 24, 48 |
| Contact Resistance | 40 mΩ max. (initial) |
| Dielectric Withstanding Voltage | 100 Vr.m.s.(for 1 minute) |
| Insulation Resistance | 100 MΩ (initial) |
| Durability | 10,000 times |
| Operating Temperature Range | -40 deg.C to +85 deg.C |

| | |
|---------------|--|
| Rated Current | V _{BUS} (Terminal No. A4, A9, B4, B9) DC 5 A (Total) |
| | GND(Terminal No. A1, A12, B1, B12) DC 5.5 A(Total) |
| | V _{CONN} (Terminal No. B5) DC 0.5 A |
| | Others DC 0.25 A |
| Rated Voltage | 48 Vr.m.s. |

Ordering Information

[Receptacle Side]

DX07 B * ** Z * * C ***

Series

DX07: USB Type-C

B: Mid-mount

Modification Code #1

No. of Contacts: 24 pos.
48 pos.

Board Connection Type:
Z: Compression Type

No. of packages

Packaging type: Tray

Modification Code #2

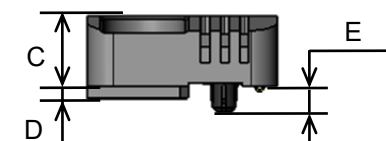
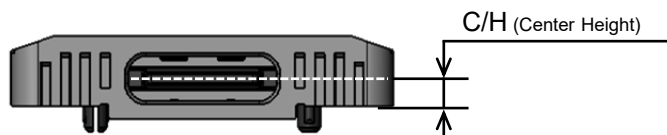
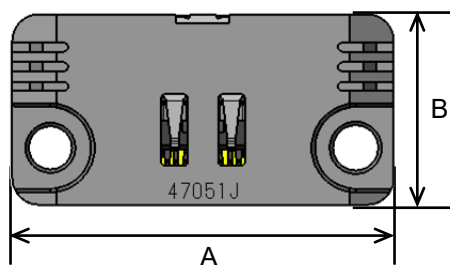
Plating Specification

J: Contact area:

Au flash over Palladium Ni over Ni plating

Outer Dimensions

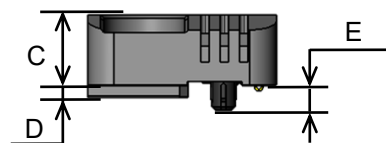
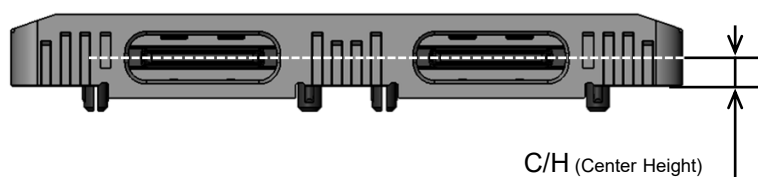
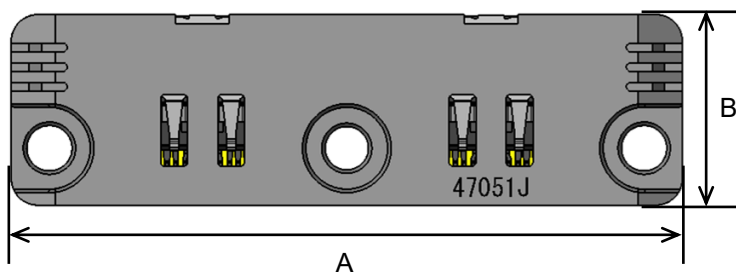
【Single Port】



Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E |
|-------------|------|-------------|-------------|-------------|-------------|-------------|
| DX07B024ZJ1 | 1.57 | 21.5 | 10.7 | 4.0 | 0.7 | 1.405 |

【Dual Port】



Unit: mm

| Part Number | C/H | Dimension A | Dimension B | Dimension C | Dimension D | Dimension E |
|-------------|------|-------------|-------------|-------------|-------------|-------------|
| DX07B048ZJ1 | 1.57 | 37.7 | 10.7 | 4.0 | 0.7 | 1.405 |

Part Numbers and Product Drawings

| Part Number | Drawing Number | Specifications | Handling Instructions | Package Quantity |
|---------------------------------|----------------------|----------------|-----------------------|--------------------------------------|
| DX07B024ZJ1 DX07B024ZJ1C1088 | SJ131900 SJ131901 | JACS-30508 | JAHL-30508 | 1,088 pcs (68 pcs/Tray x 16 Tray) |
| DX07B048ZJ1 DX07B048ZJ1C768 | SJ131902 SJ131903 | | | 768 pcs (48 pcs/Tray x 16 Tray) |

Remarks: Please refer to the chart below for brochures of other DX07 series variations.

| Brochure Number | Brochure Name |
|-----------------|--------------------------------------|
| MB-0297-* | DX07 SMT Contact Receptacle |
| MB-0301-* | DX07 Plug Series |
| MB-0324-* | DX07 Harness |
| MB-0332-* | DX07 Vertical Plug |
| MB-0333-* | DX07 Waterproof Receptacle |
| MB-0335-* | DX07 Hybrid Contact Receptacle |
| MB-0350-* | DX07 16-position Receptacle |
| MB-0362-* | DX07 USB4 Gen3 Compatible Receptacle |

Notice:

- The specifications provided in this brochure are for reference purpose only. The products and their specifications are subject to change without notice. Please contact our sales representatives for further information before considering or placing an order. A formal product specification must be agreed upon prior to purchase.
- Users are responsible for implementing appropriate protection 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 provide separate support based on your specified quality assurance program, 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.

Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.

JAE Connector Div. Proprietary. Copyright © 2026, Japan Aviation Electronics Industry, Ltd.