

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

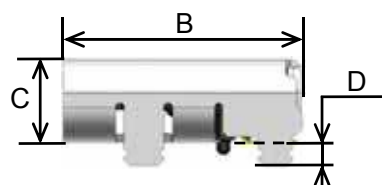
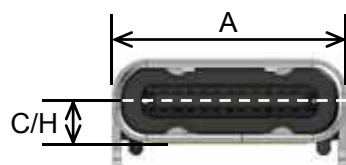
J: SMT Type

X: Hybrid Type


TID Number

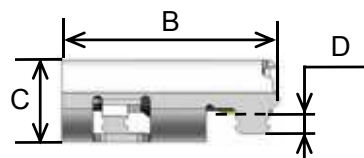
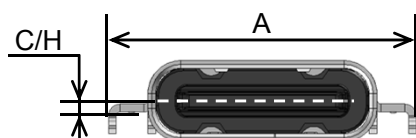
Part Number	TID Number	Thunderbolt 4 Certification
DX07S024JAA	4729	Certified
DX07B024JAA	5067	Certified
DX07BD24JJ4	5362	—
DX07S024XJ4	7420	—
DX07S024XA8	8315	—

Outer Dimensions



On-board

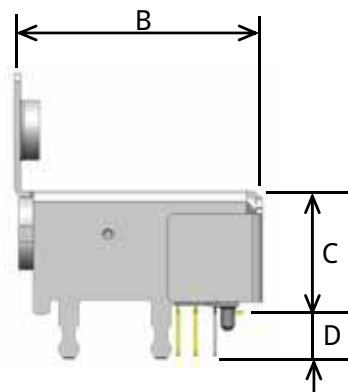
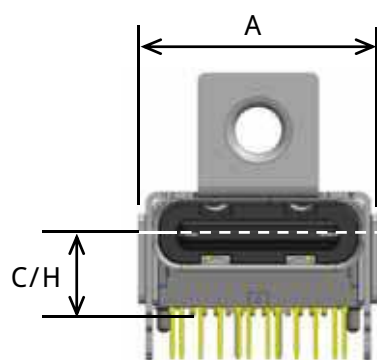
Unit: mm

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.