

<<Outline>>

The DX07 Series connectors are compatible with the next-generation USB specification "USB Type-C<sup>™</sup>" and are expected to become popular as a standard interface for various devices.

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

# Features

- Compatible with Universal Serial Bus Type-C Specification Release 1.3
- Compatible with USB Power Delivery 3.0
- Compatible with 10Gbps SuperSpeed Plus communication (USB 3.1 Gen2)
- Supports 5A max power supply (Compatible with USB Power Delivery)
- Symmetric interface which allows for the plug to be inserted upside down or right side up.
- Superior EMI / EMC characteristics.
- Lock structure with superior durability.
- Realizes downsizing of hood.

## **Applicable Markets**

Mobile phones, smartphones, tablets, notebook PCs, TV, monitor, gaming devices, external storage mediums, digital cameras, and other small portable devices and industrial equipment

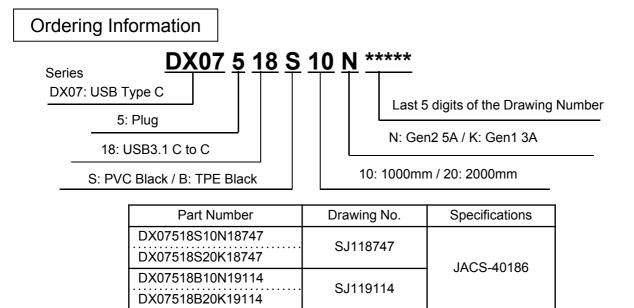
# **General Specifications**

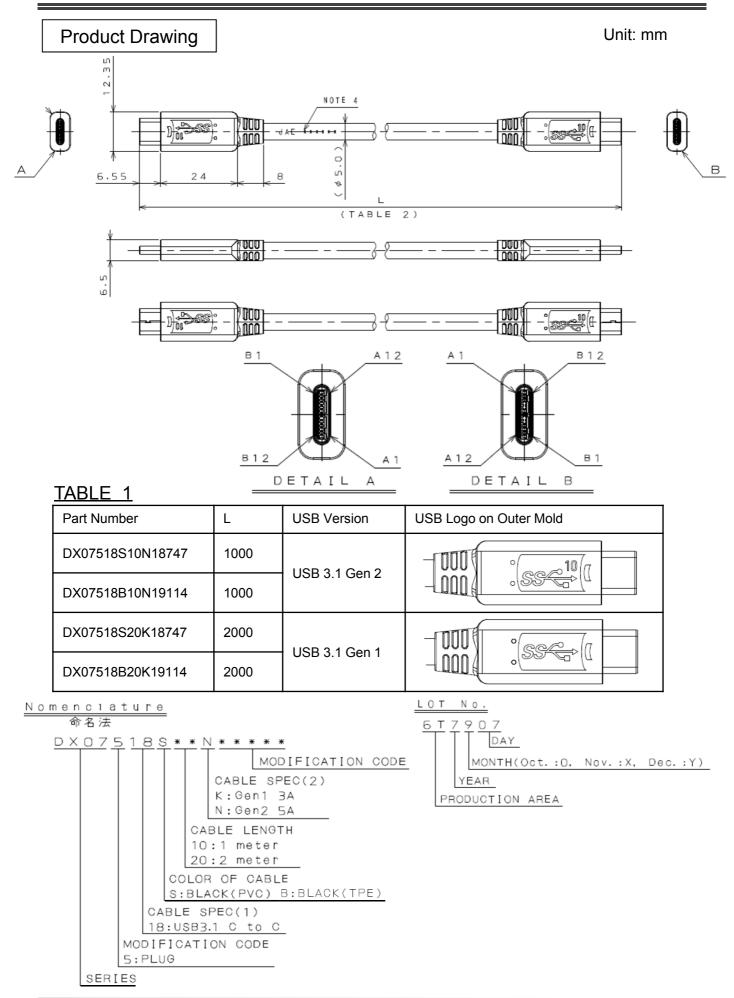
Connector Type	Type-C Plug on Both Ends					
Product Number	DX07518S10N 18747	DX07518S20K 18747	DX07518B10N 19114	DX07518B20K 19114		
Length	1m	2m	1m	2m		
Rated Current	5 A max.	3 A max.	5 A max.	3 A max.		
Appliachla Standarda	USB 3.1 Gen 2	USB 3.1 Gen 1	USB 3.1 Gen 2	USB 3.1 Gen 1		
Applicable Standards	USB Type-C Rev. 1.3, USB Power Delivery Rev 3.0					
Material / Color (hood, bushing, and cable)	PVC / Black		TPE / Black			
USB Certification	Certified		Now Planned			
TID	5,200,000,570	3,200,000,113	-	-		
No. of Contacts for Plug	24 pos.					
Rated Voltage	AC 20 V r.m.s.					
Contact Resistance	Initial 40 mΩ max.					
Dielectric Withstanding Voltage	AC 100 V r.m.s. (for 1 minute)					
Insulation Resistance	Initial 10 MΩ min.					
Operating Temperature Range	+10° C to +40° C					
Mating Durability	10,000 times					

## Materials and Finishes

Components	Materials and Finishes		
Plug	DX07P024AJ5		
Paddle Guard	Multi-layer glass-epoxy board		
Back Shell	Stainless steel		
Locator	Glass-reinforced nylon		
Accessory Parts	Heat resistant tape, adhesive, and others		
Inner Mold	PA		
Outer Mold	PVC Black or TPE Black		
Cable Jacket	PVC Black or TPE Black		

Note: Please refer to the Product Drawings for further details.





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PIN	E 2	(NOTE1)	WIRE AREA	PADDLE CARD		PIN
NUMBER	NAME	AREA	-	AREA	NAME	NUMBER
		E-MARKER				
A 1	GND		I		GND	A 1
A 2	SSTXp1	┟──┼─┼─┼			SSTXp1	A 2
AЗ	SSTXn1			^	SSTXn1	AЗ
A 4	VBUS	┝╈╢┝┥╴╽╴╽╴╽			Veus	A 4
Α5	СС	┝ᠰ᠆ᠰ᠆ᠰ᠆ᡧ	-^^^-		00	Α5
A 6	Dp1	┟ᠰᢩ᠆ᠰ᠆ᠰ᠆᠆ᠰ	-^^^^		Dp1	AБ
Α7	Dn 1	┟ᠰᢩ᠆ᠰ᠆᠆ᠰ᠆᠆ᠰ	-^^^^	hh_	Dn 1	Α7
A 8	SBU1	┝╋╧	-ᠰᠰ──┐┌──ᠰᠰ─	hh_	SBU1	A 8
Α9	VBUS				VBUS	Α9
A 1 0	SSRXn2	┝ᠰᢩ᠆ᠰ᠆ᠰ᠆᠆ᠰ	_ᠰᠰᢩ᠋᠋┌_ᠰᠰᢩ		SSRXn2	A 1 0
A 1 1	SSRXp2	┝ᠰᢩ᠆ᠰ᠆ᠰ᠆᠆	<u>-</u> ᠰᠰᡪ╎╎╎╎┌ᠰᠰᢩ	hh_	SSRXp2	A 1 1
A 1 2	GND			-∱	GND	A 1 2
B 1	<b>GND</b>	┝╋┯┥╴╽╴╽		-∽	GND	В 1
В2	SSTXp2		_↓↓_\$\$\$\$\$	^^^	SSTXp2	В2
вЗ	SSTXn2				SSTXn2	в 3
В4	VBUS			10 n F	VBUS	В4
B 5	V CONN		_ᠰᠰᢩᠰᠰᢩᠰᠰ_		VCONN	85
B 6						B 6
B 7			$-\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow\uparrow$			B 7
B 8	SBU2				SBU2	88
B 9	VBUS			10 n F  +	VBUS	B 9
B10	SSRXn1			^	SSRXn1	в10
B11	SSRXp1				SSRXp1	B11
B12	GND				GND	B12
SHELL	SH[ELD	-		-	SH[ELD	SHELL

### NOTE1. CIRCUIT SHEMATIC OF PADDLE CARD IS SHOWN IN TABLE2. 2. THIS CABLE ASSEMBLY IS FOR "USB3.1 TYPE-C TO TYPE-C" SPEC. 3. USB VERSION AND USB LOGO VERSION ARE SHOWN IN TABLE1.

4. LOT NUMBER IS MARKED BETWEEN EACH OUTER MOLD.

5. 100% OPEN, SHORT & MIS-WIRE TEST.

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