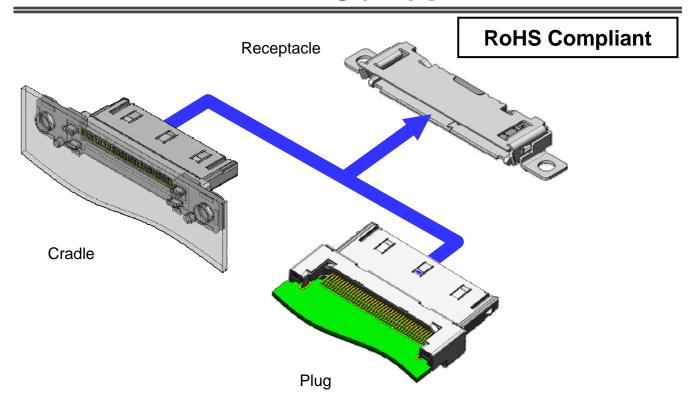




High-speed Transmission Compatible Low-profile Docking Connector

# **DD4 Series**

CONNECTOR
MB-0270-1
September 2013



The DD4 Series is an external interface connector compatible with high-speed signals such as USB 3.0, DisplayPort<sup>™</sup>, SATA Gen2.

DisplayPort™ is a registered trademark of Video Electronics Standards Association (VESA).

### **Features**

- ■Connector to transmit high-speed signals of transmission standards such as USB3.0, DisplayPort<sup>™</sup>, SATA Gen2.
- ■Achieves low profile, mounted height 2.8mm to comply with the demand for slimmer devices.
- ■Enhanced twisting resistance against insertion and removal through equipping a guide rail on shell.
- ■Allows insertion and removal while conducting electricity with first mate last break receptacle side power supply pin.
- Available on embossed tape for automatic mounting.

### **Applicable Markets**

Notebook PC, tablet PC, hand-held devices such as portable game player.

### **General Specifications**

■No. of Contacts: 40 pos.

■ Contact Resistance:

50m  $\Omega$  max. (initial)

■ Dielectric Withstanding Voltage:

AC300Vr.m.s for 1 minute

■Operating Temperature:

-25 Deg. C to +75 Deg. C

■ Rated Current:

0.1A / 1 pos. (signal) 1.1A / 1pos. (power)

■Insulation Resistance:

100M  $\Omega$  min. (initial)

■Life time: 5,000 times

### Materials and Finishes

### ■ Receptacle

Component	Material and Finish		
Shell	Stainless-steel / Ni plating		
Insulator	Synthetic resin		
Contact	Contact area: Copper alloy / Au plating over Ni Terminal area: Copper alloy / Au flash plating over Ni		

### **■**Plug

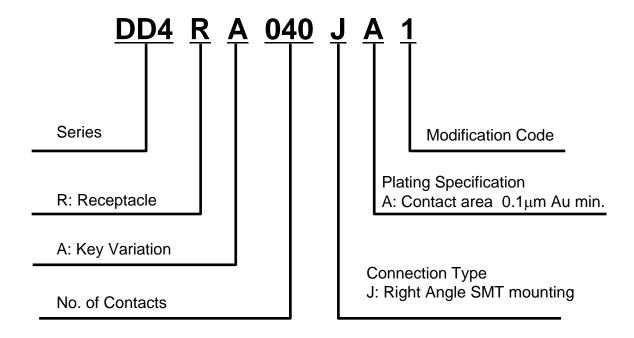
Component	Material and Finish		
Shell	Stainless-steel / Ni plating		
Lock Spring	Stainless-steel		
Inner Insulator	Synthetic resin		
Base Insulator	Synthetic resin		
Contact	Contact area: Copper alloy / Au plating over Ni Terminal area: Copper alloy / Au flash plating over Ni		

#### ■Cradle

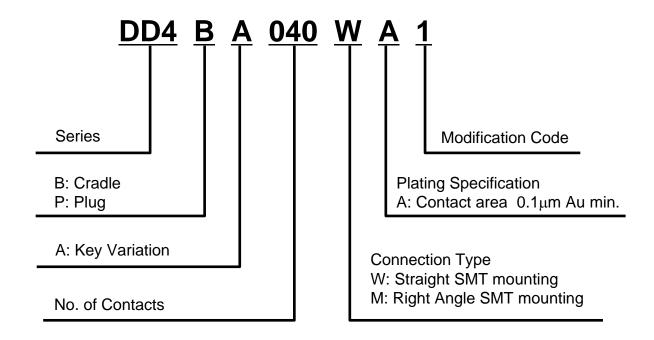
Component	Material and Finish		
Shell	Stainless-steel / Ni plating		
Сар	Synthetic resin		
Inner Insulator	Synthetic resin		
Base Insulator	Synthetic resin		
Contact	Contact area: Copper alloy / Au plating over Ni Terminal area: Copper alloy / Au flash plating over Ni		

# **Ordering Information**

### ■ Receptacle

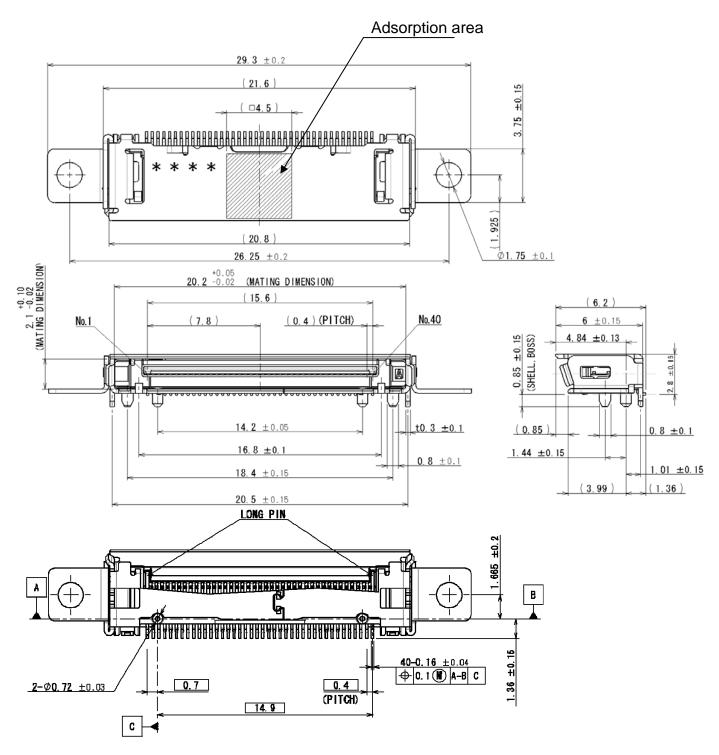


### ■Plug / Cradle



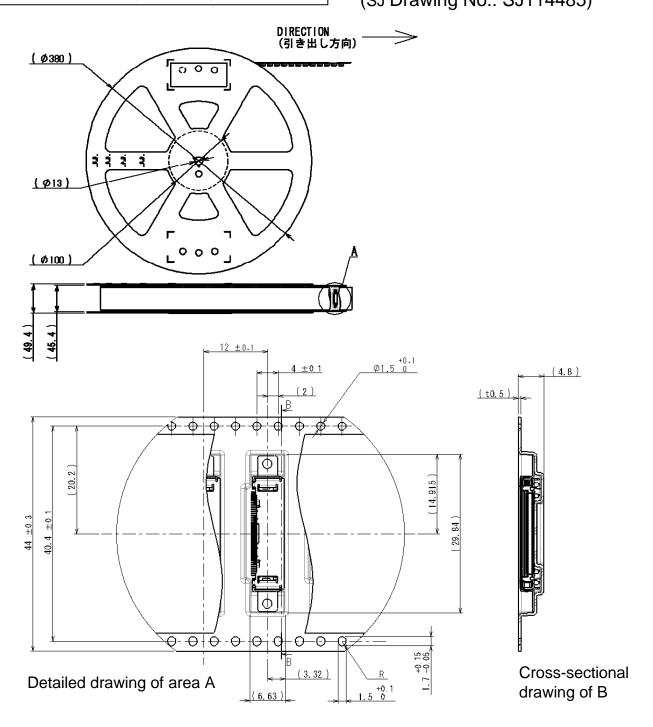
# Product Drawing (Individual Product)

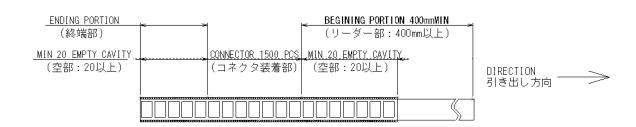
Part Number: DD4RA40JA1 (SJ Drawing No.: SJ114484)



# Product Drawing (Packaged Product)

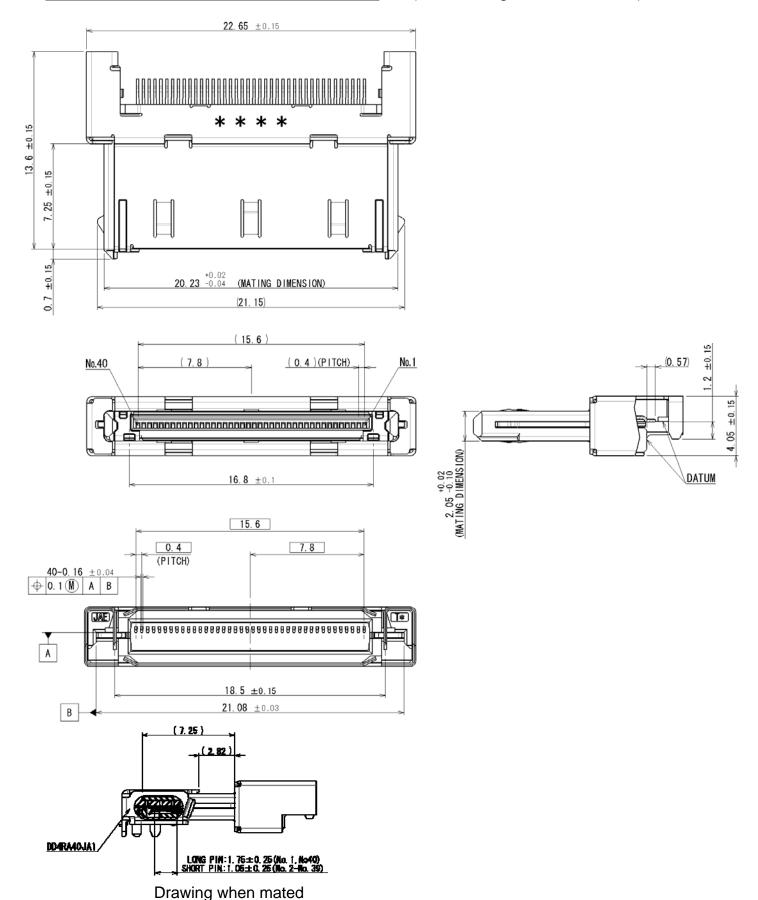
Part Number: DD4RA40JA1R1500 (SJ Drawing No.: SJ114485)





# Product Drawing (Individual Product)

Part Number: DD4PA40MA1 (SJ Drawing No.: SJ114486)

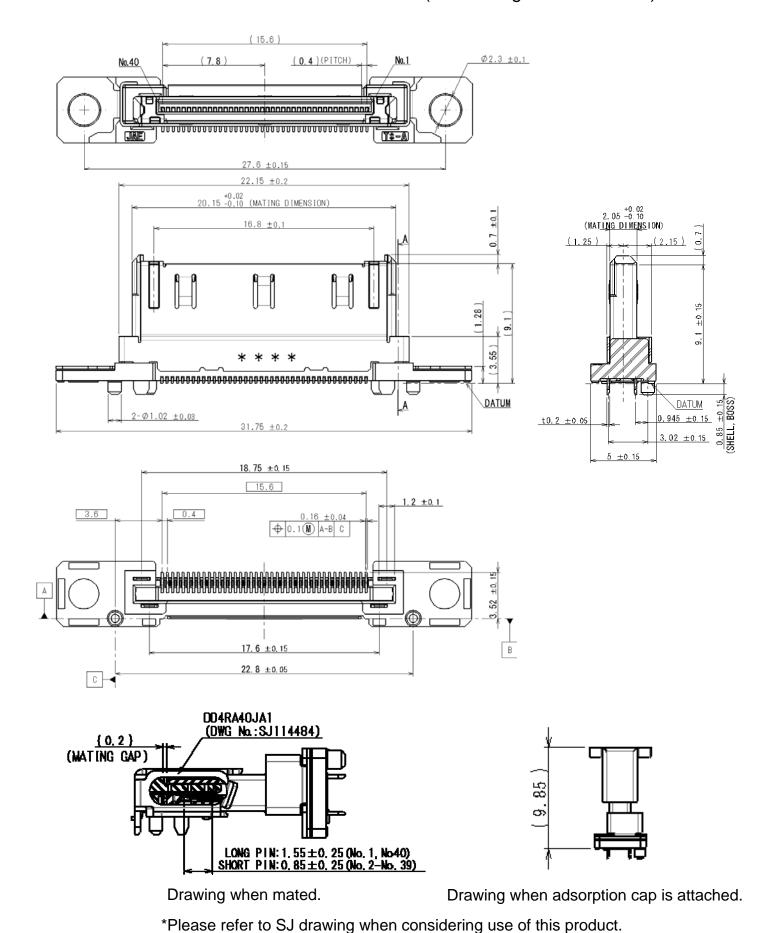


# Part Number: DD4PA40MA1R900 **Product Drawing (Packaged Product)** (SJ Drawing No.: SJ114487) DIRECTION (引き出し方向) ( Ø380 ) 000 4 3 { Ø 13 } ٥٥٥ (Ø100) 45.4 (49.4) 20 ±0.1 +0.1 Ø1.5 0 $4 \pm 0.1$ (2) 20.2) (11.645) $40.4 \pm 0.$ (23.29) ? <del>-0 -0 -0 -0 |0 -0| 0 -0| 0</del>-+0.15 1.7 -0.05 Cross-sectional drawing of B Detailed drawing of area A (7.45) (14.94)



### **Product Drawing (Individual Product)**

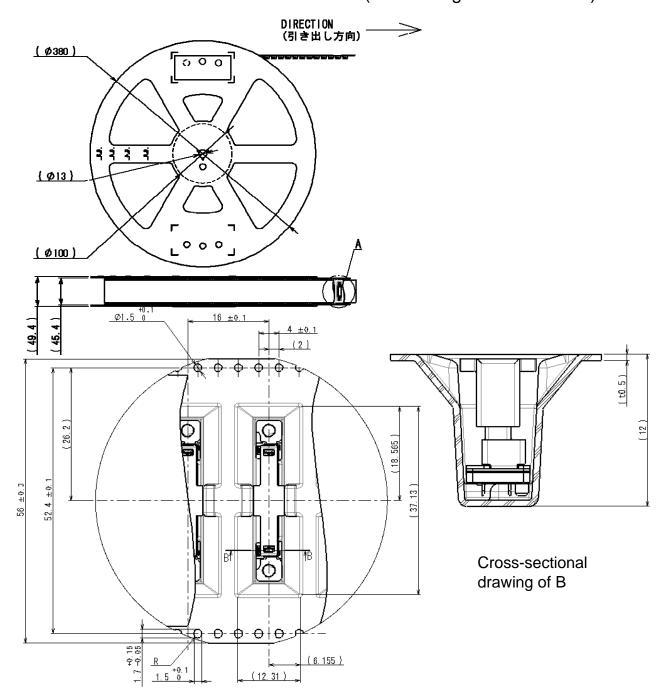
Part Number: DD4BA40WA1 (SJ Drawing No.: SJ114488)



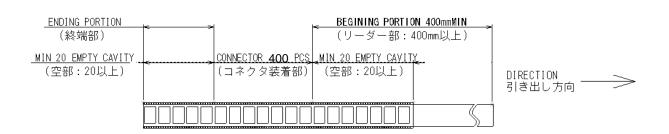
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## Product Drawing (Packaged Product)

Part Number: DD4BA40WA1R400 (SJ Drawing No.: SJ114489)

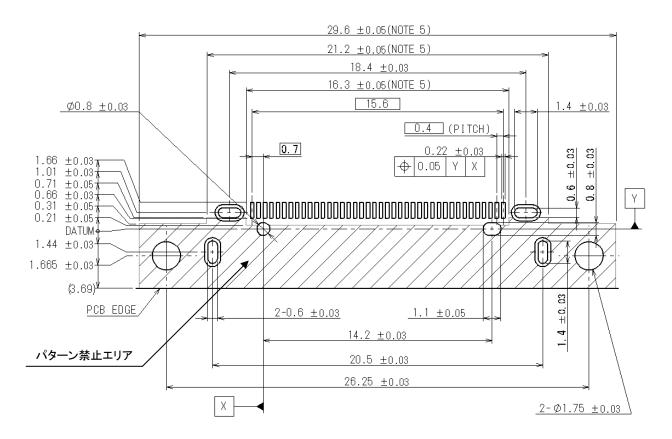


Detailed drawing of area A



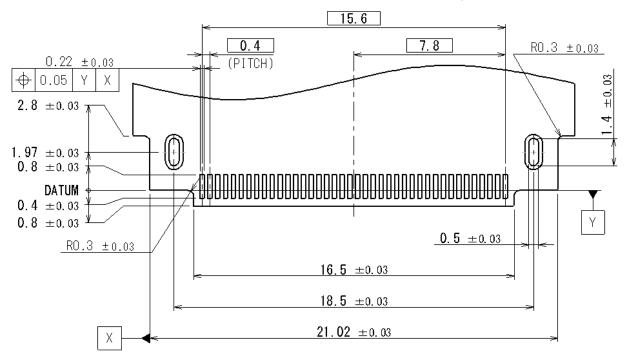
### <Applicable Dimensions of Board>

# Part Number: DD4RA40JA1 (SJ Drawing No.: SJ114484)



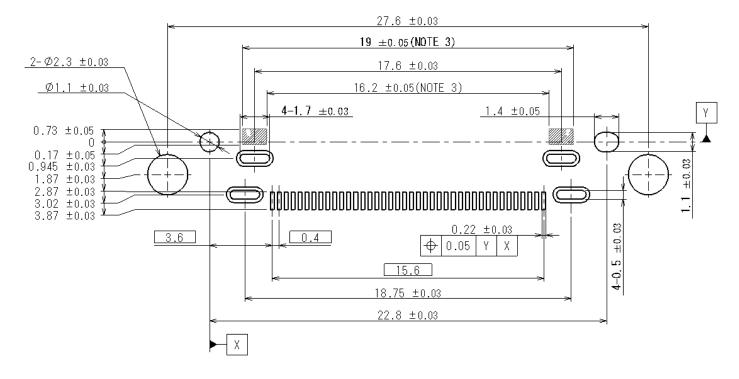
### <Applicable Dimensions of Board>

# Part Number: DD4PA40MA1 (SJ Drawing No.: SJ114486)



## <Applicable Dimensions of Board>

# Part Number: DD4BA40WA1 (SJ Drawing No.: SJ114488)



## **Product Drawing and Specifications**

Part Numb	per	DD4RA40JA1 (R1500)	DD4PA40MA1 (R900)	DD4BA40WA1 (R400)	
Connector Shape		Receptacle	Plug	Cradle	
Depth [mm]		(6.2)	14.3 +/-0.3	5 +/-0.15	
Height (when mated) [mm]		2.8 +/-0.15	4.05 +/-0.15	(9.8)	
Width [mm]		29.3 +/-0.2	22.65 +/-0.15	31.75 +/-0.2	
Board Fixing Method					
	Hold-down	Four points	Two points	Four points	
	Screw fixed	Two points		Two points	
Specification		JACS-30256-1			
Drawing No.	Individual Product	SJ114484	SJ114486	SJ114488	
	Packaged Product	SJ114485	SJ114487	SJ114489	

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