

NEW



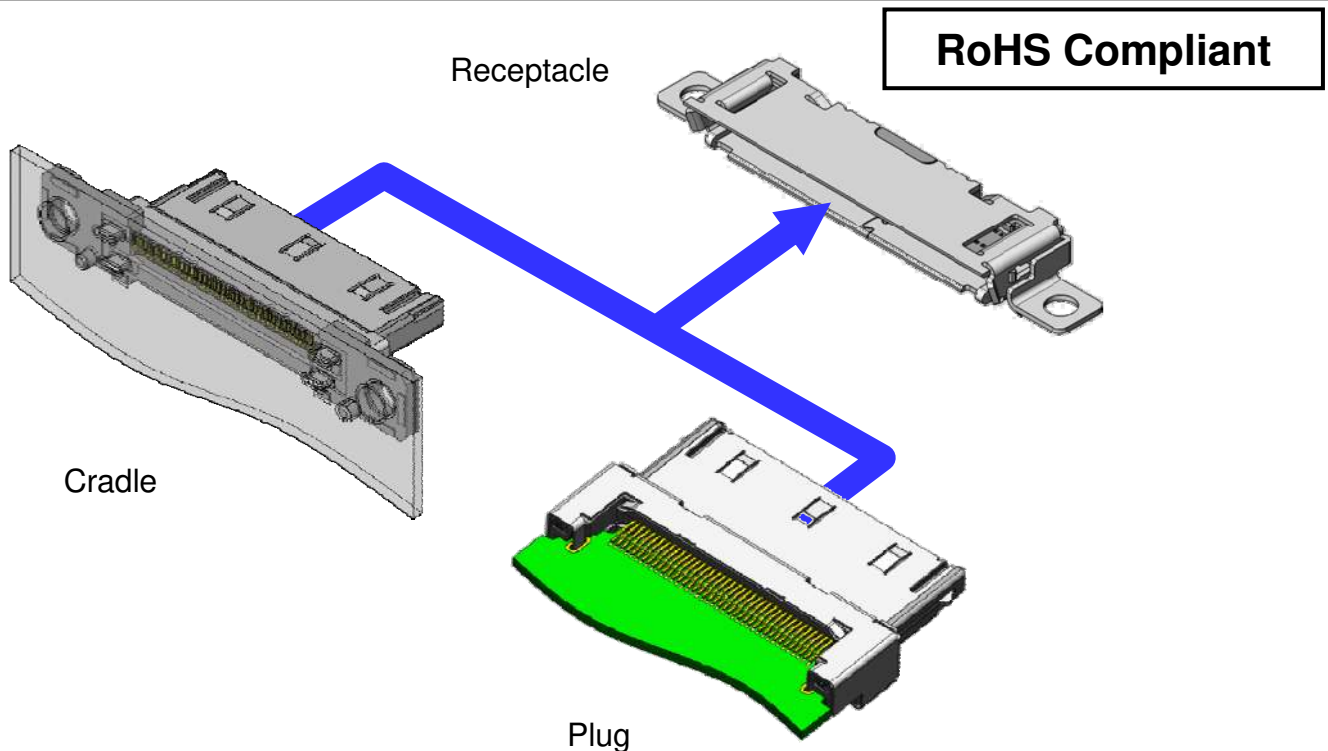
High-speed Transmission Compatible
Low-profile Docking Connector

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™, 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™, 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 Ω 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 Ω 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

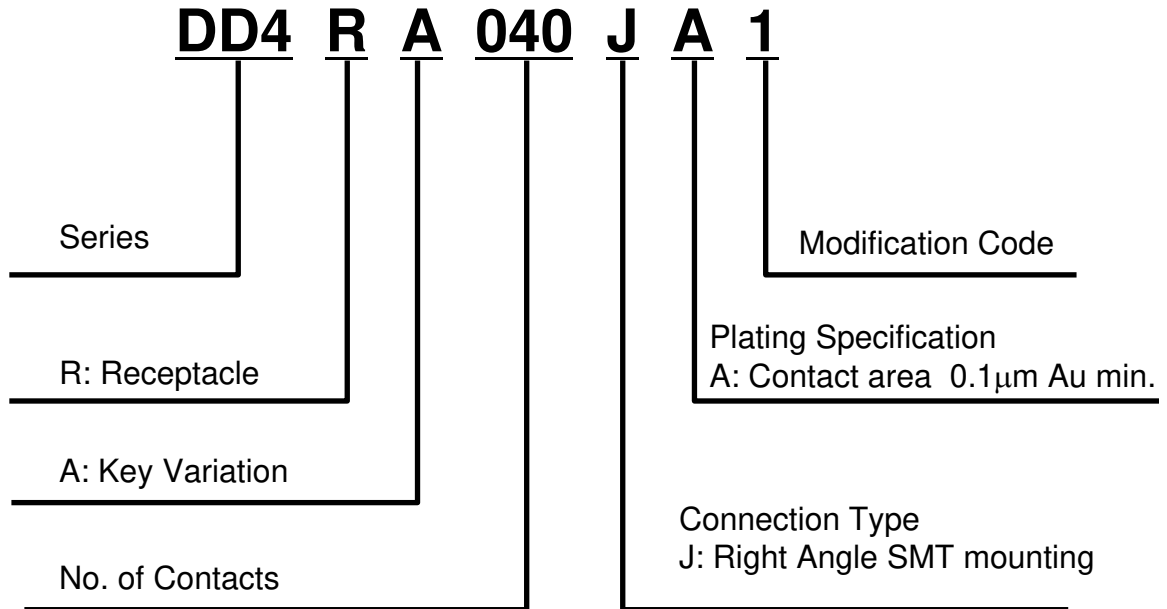
| Component | Material and Finish |
|-----------------|---|
| Shell | Stainless-steel / Ni plating |
| Lock Spring | Stainless-steel |
| Inner Insulator | Synthetic resin |
| Base Insulator | Synthetic resin |
| Contact | Contact area: Copper alloy / Au plating over Ni Terminal area: Copper alloy / Au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

■ Cradle

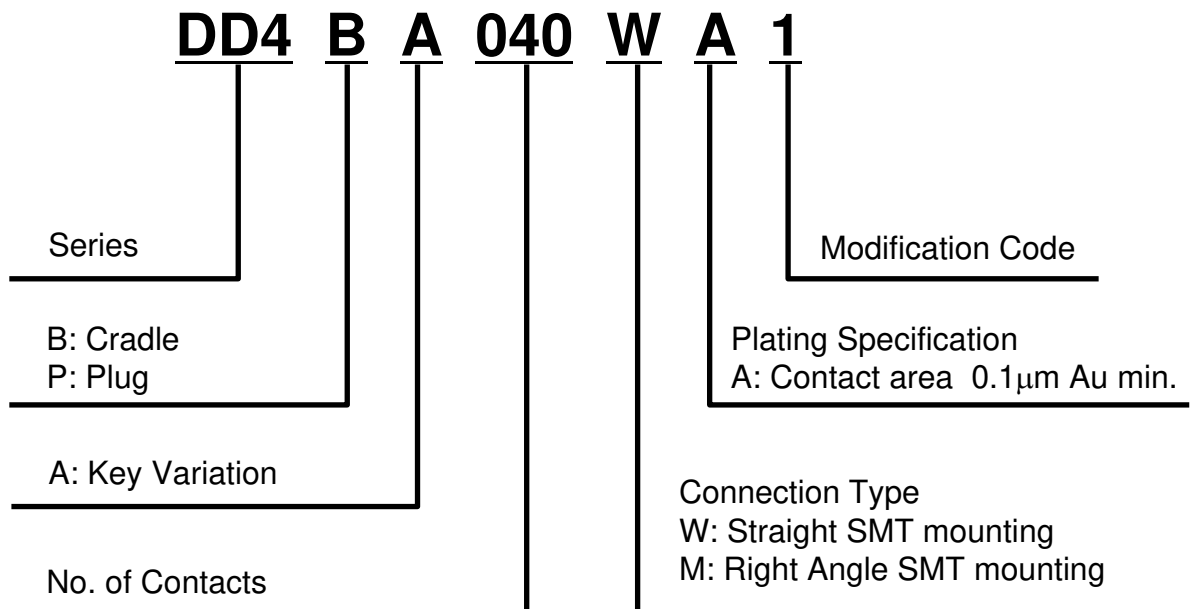
| Component | Material and Finish |
|-----------------|---|
| Shell | Stainless-steel / Ni plating |
| Cap | Synthetic resin |
| Inner Insulator | Synthetic resin |
| Base Insulator | Synthetic resin |
| Contact | Contact area: Copper alloy / Au plating over Ni Terminal area: Copper alloy / Au flash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

Ordering Information

■ Receptacle

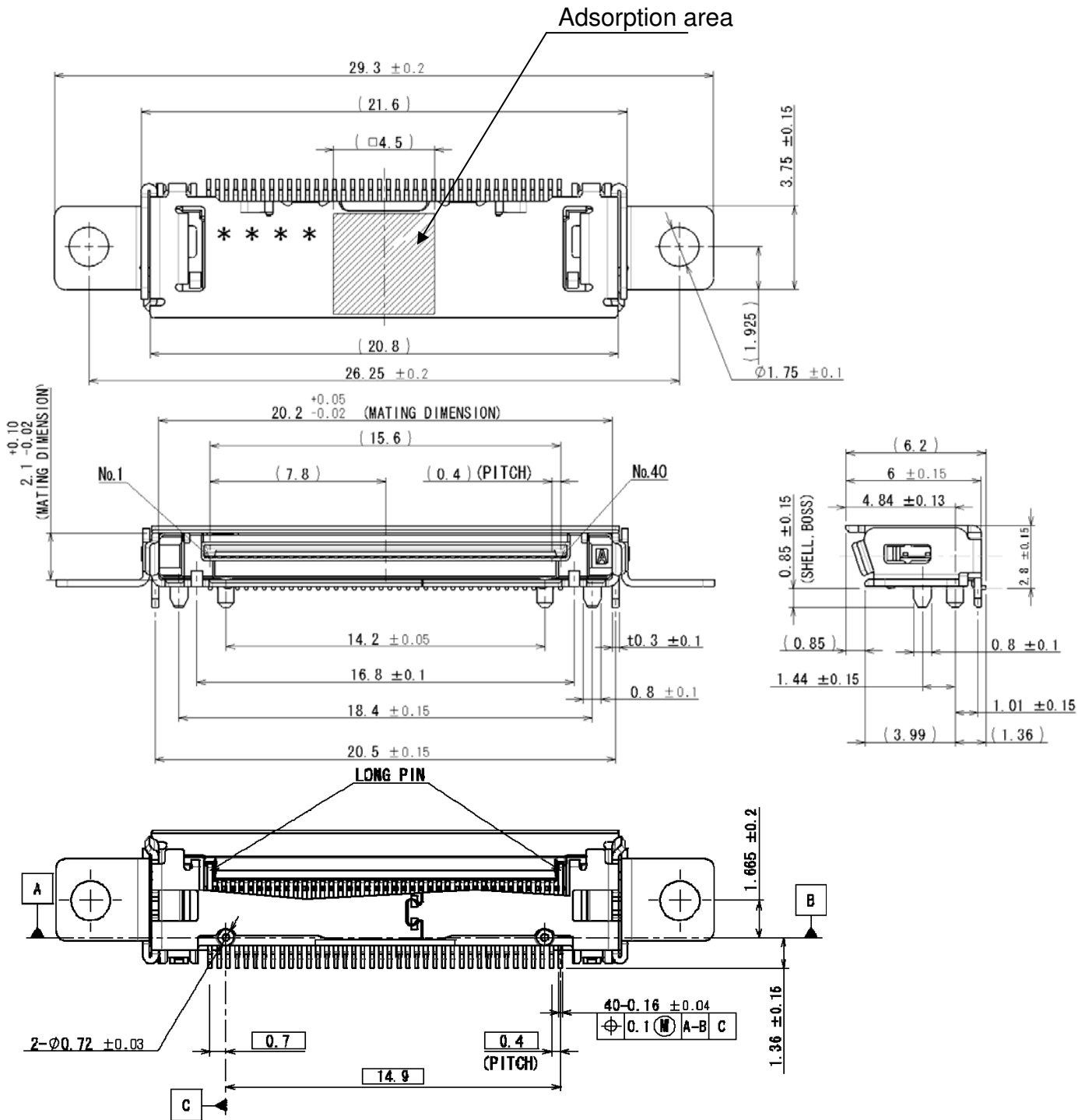


■ Plug / Cradle



Product Drawing (Individual Product)

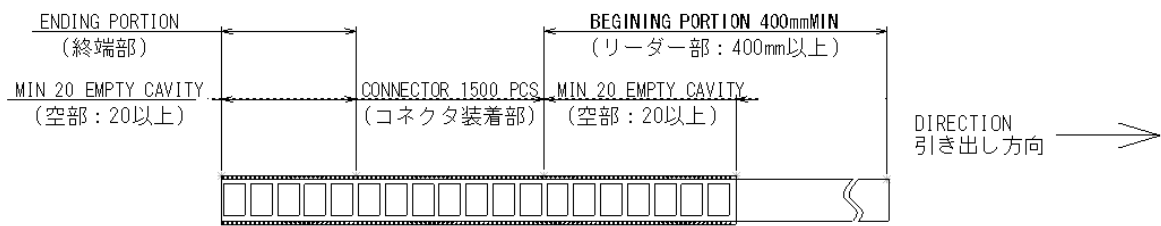
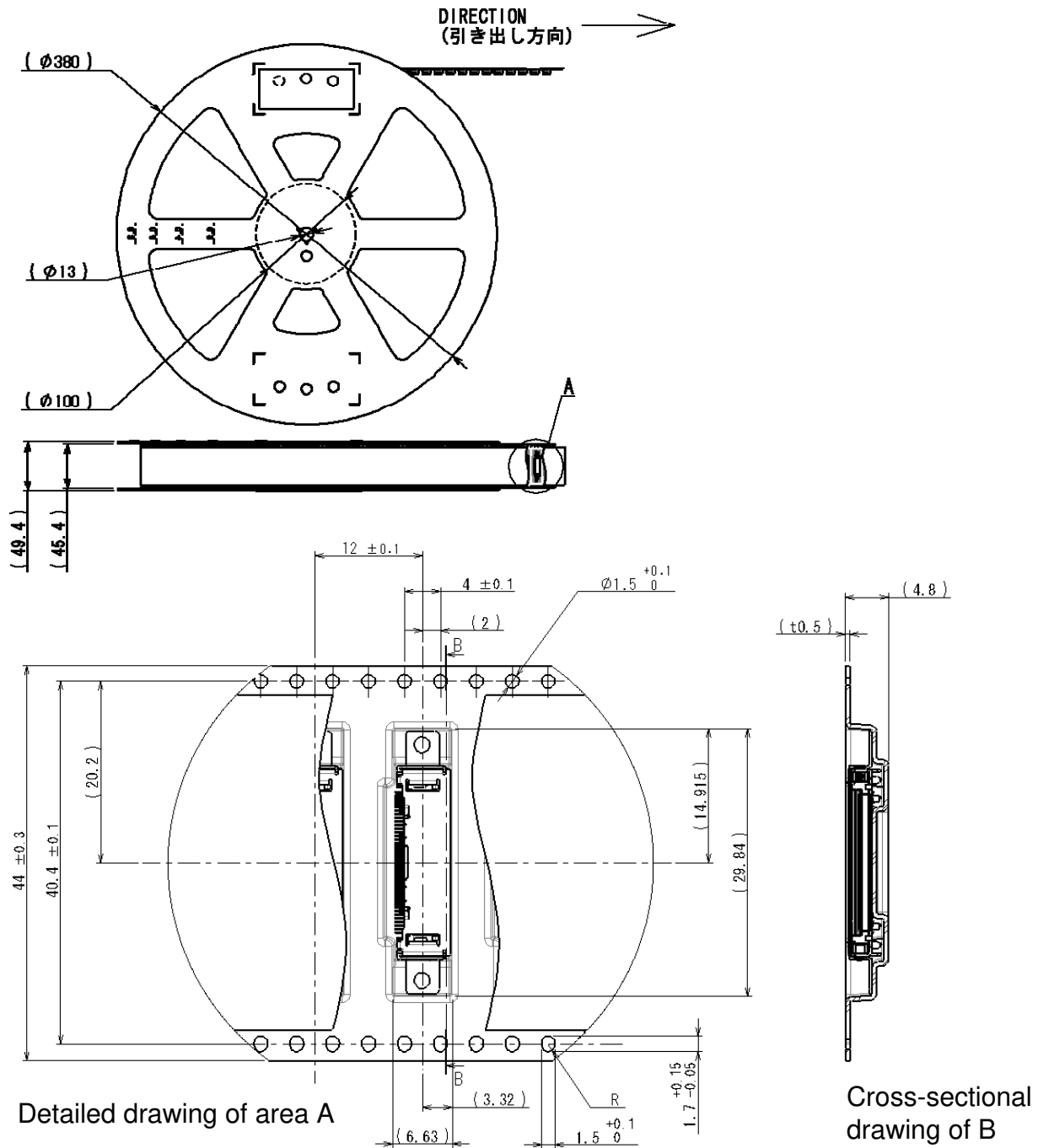
Part Number: DD4RA40JA1
(SJ Drawing No.: SJ114484)



*Please refer to SJ drawing when considering use of this product.

Product Drawing (Packaged Product)

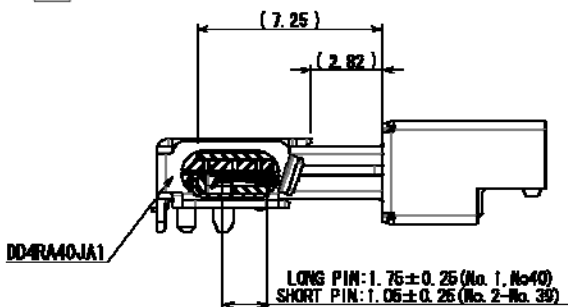
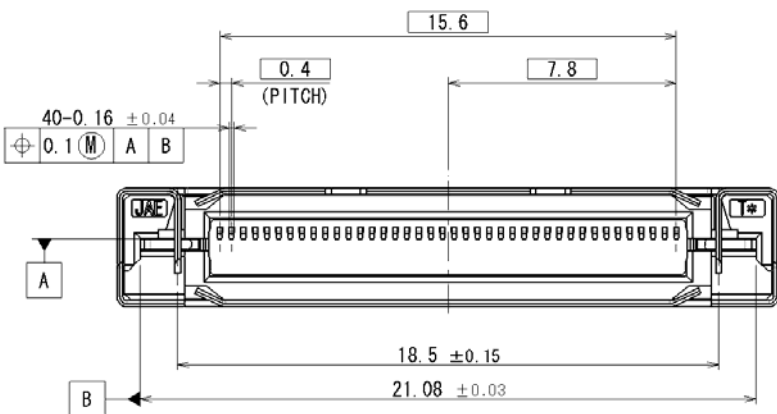
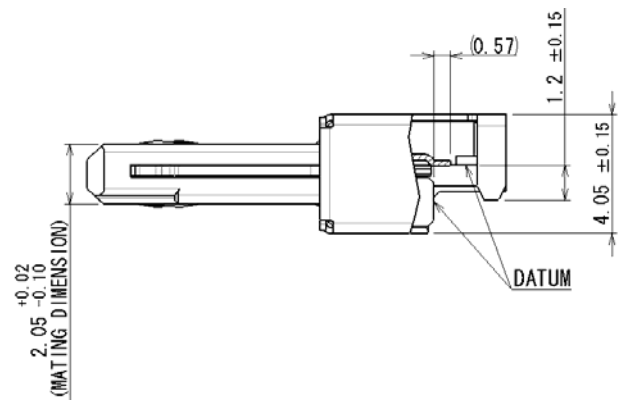
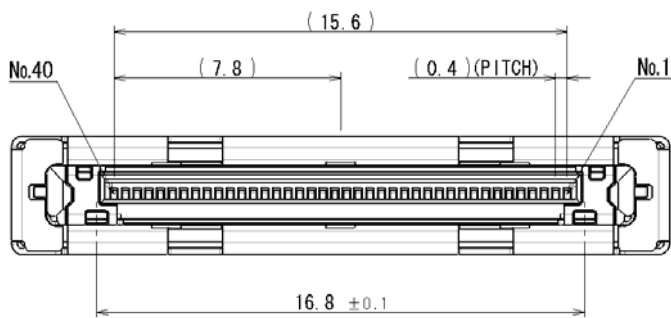
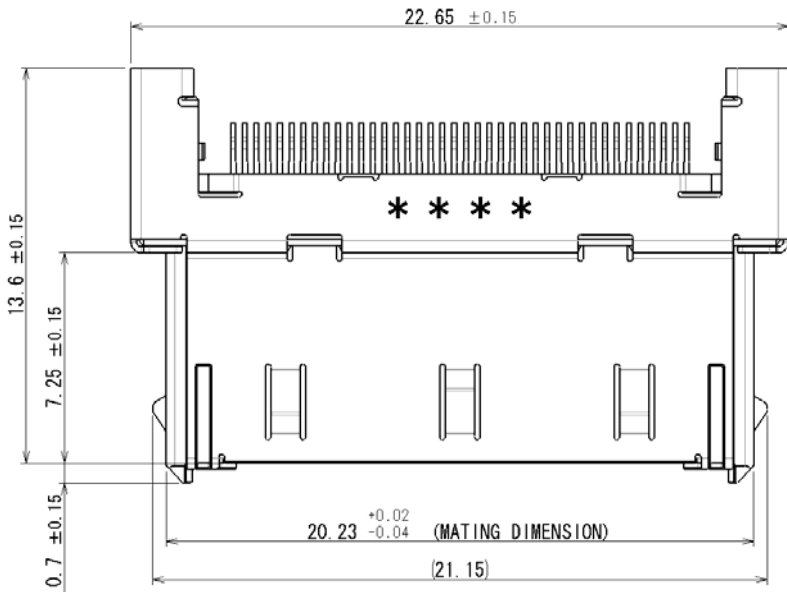
Part Number: DD4RA40JA1R1500
(SJ Drawing No.: SJ114485)



*Please refer to SJ drawing when considering use of this product.

Product Drawing (Individual Product)

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

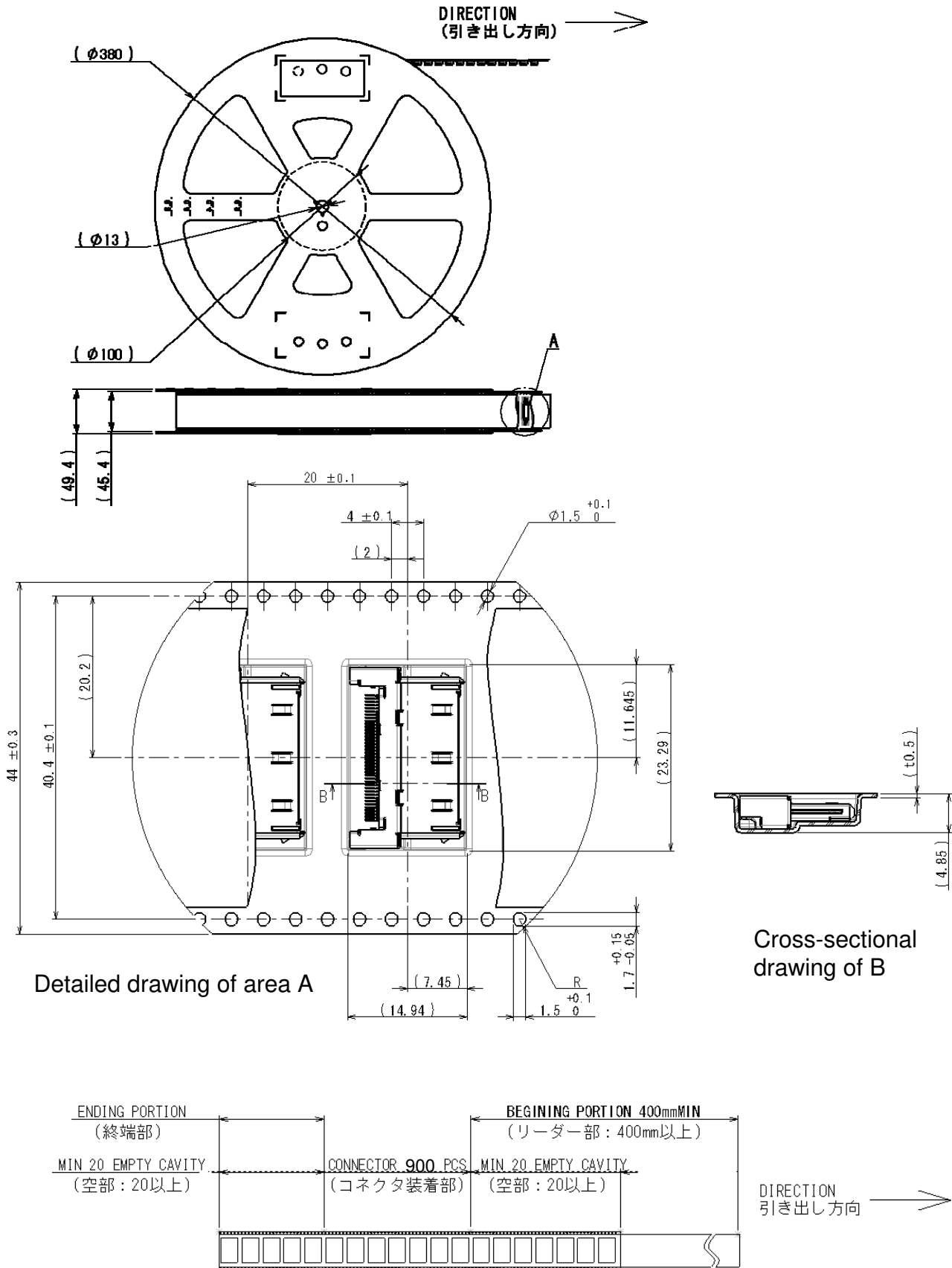


Drawing when mated

*Please refer to SJ drawing when considering use of this product.

Product Drawing (Packaged Product)

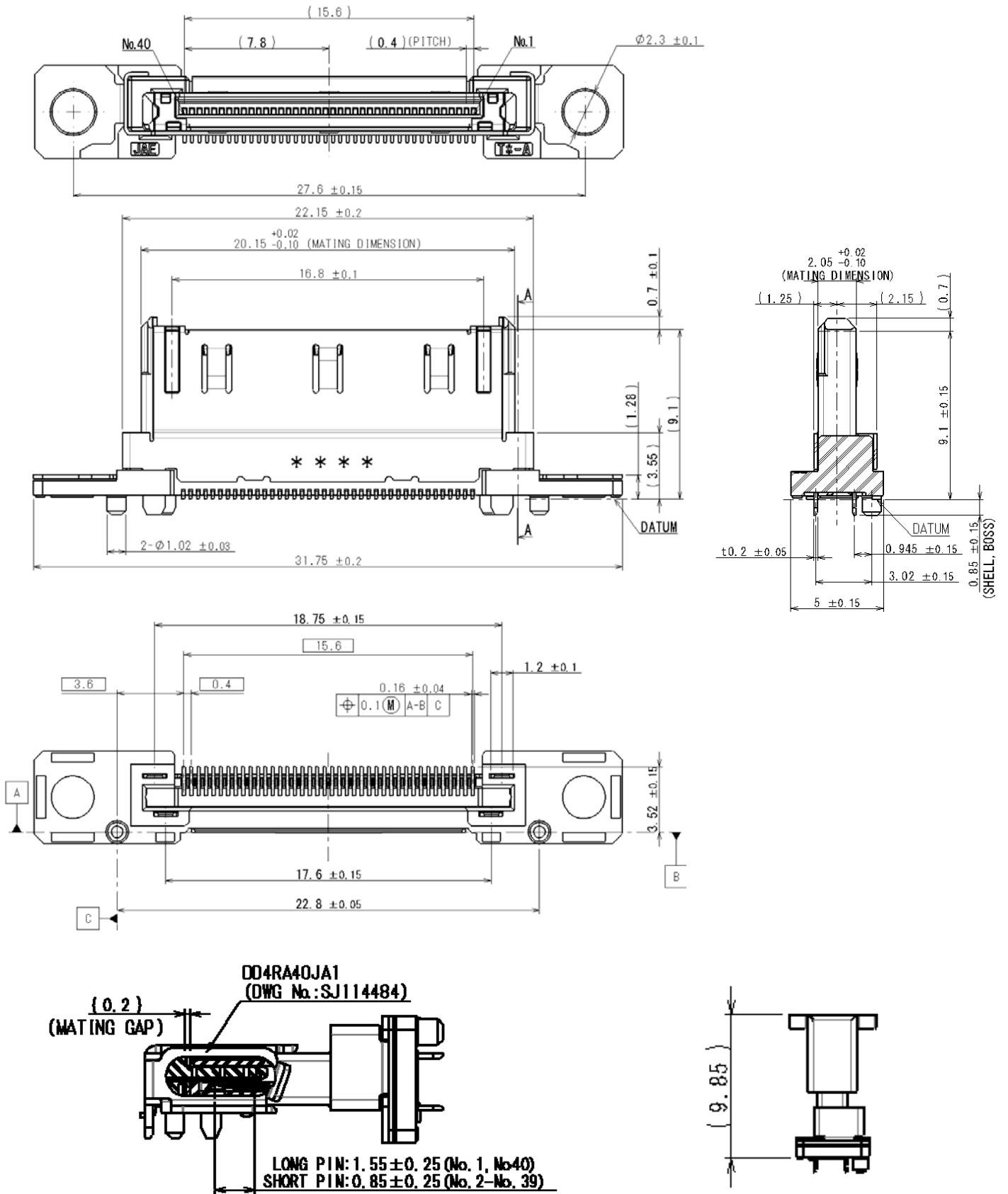
Part Number: DD4PA40MA1R900
(SJ Drawing No.: SJ114487)



*Please refer to SJ drawing when considering use of this product.

Product Drawing (Individual Product)

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



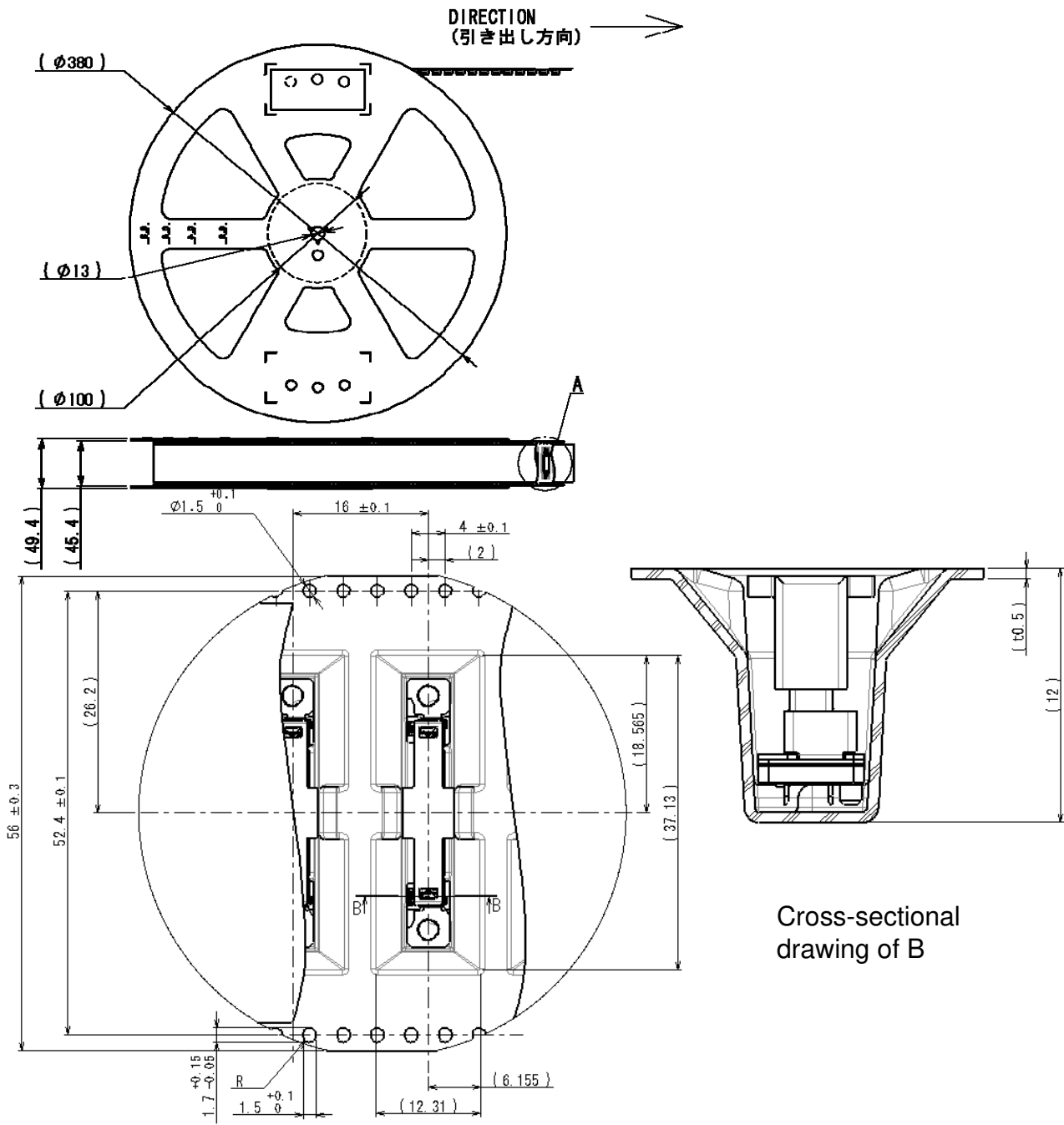
Drawing when mated.

Drawing when adsorption cap is attached.

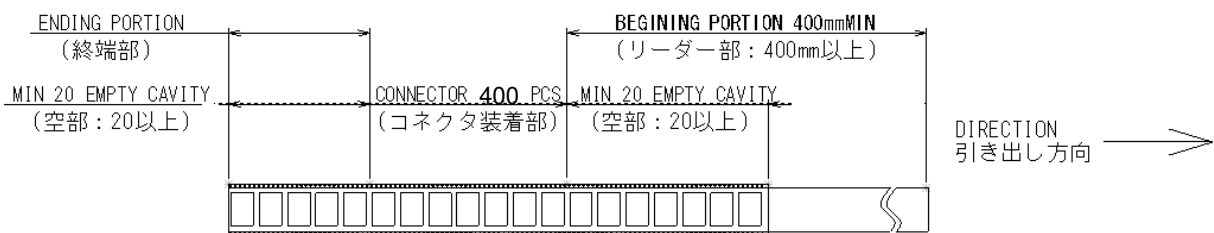
*Please refer to SJ drawing when considering use of this product.

Product Drawing (Packaged Product)

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



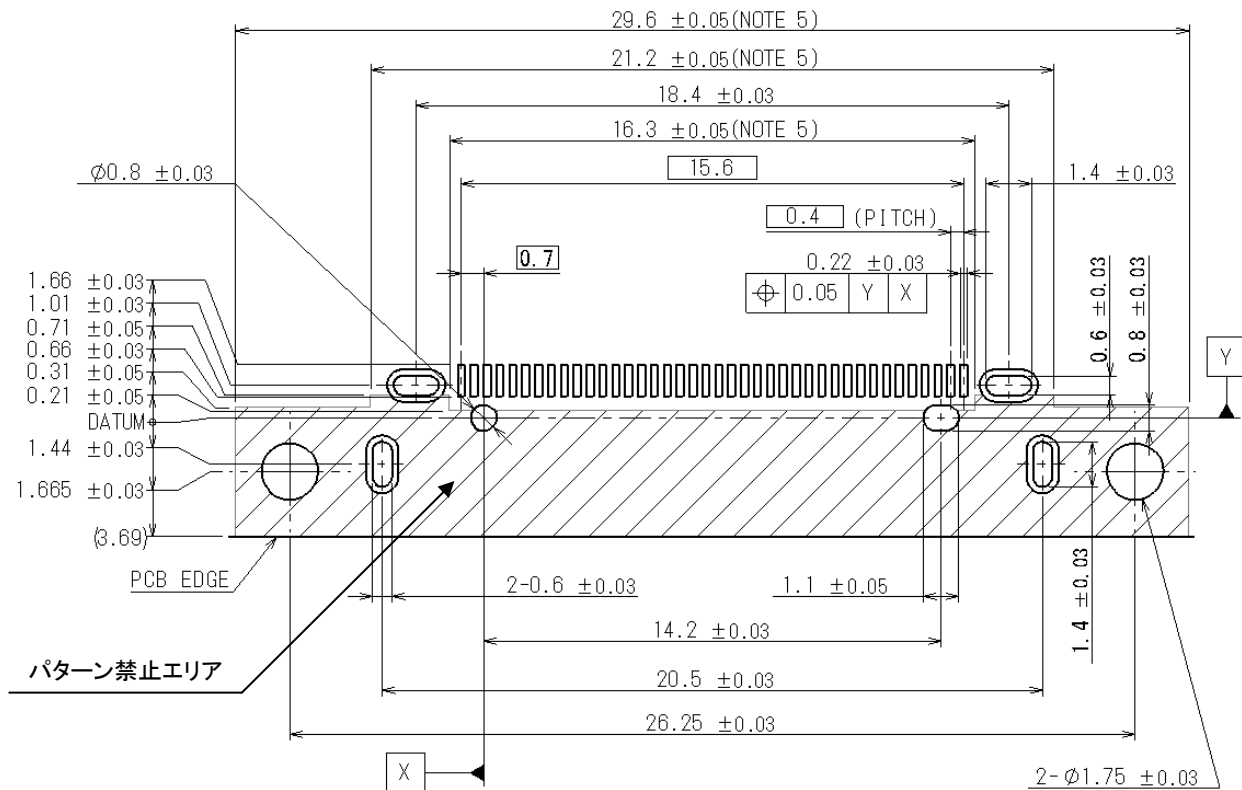
Detailed drawing of area A



*Please refer to SJ drawing when considering use of this product.

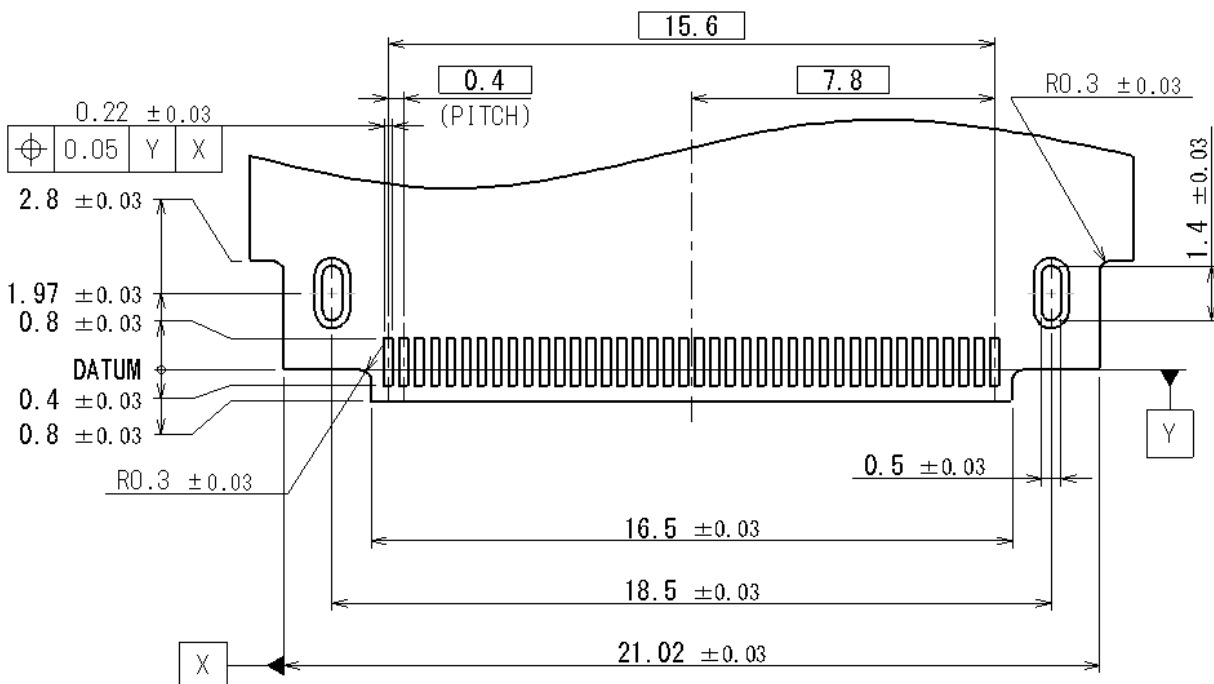
<Applicable Dimensions of Board>

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



<Applicable Dimensions of Board>

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



*Please refer to SJ drawing when considering use of this product.

| |
|------------------------------------|
| Product Drawing and Specifications |
|------------------------------------|

| | | | |
|--------------------------|-----------------------|----------------------|----------------------|
| Part Number | 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 |
| | Screw fixed | Two points | Two points |
| Specification | JACS-30256-1 | | |
| Drawing No. | Individual Product | SJ114484 | SJ114486 |
| | Packaged Product | SJ114485 | SJ114487 |

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

Product Marketing Division
 Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539
 Phone: +81-3-3780-2882 FAX: +81-3-3780-2946

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