



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

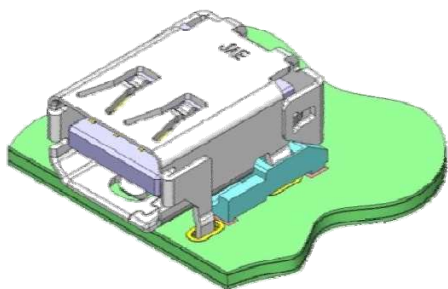
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



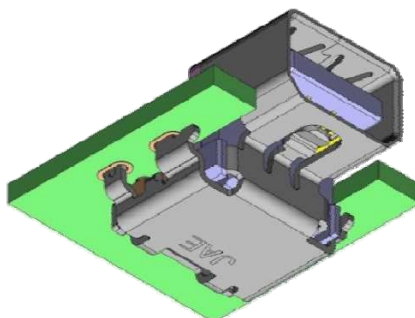
NEW


Thunderbolt Compatible Connector DP3 Series

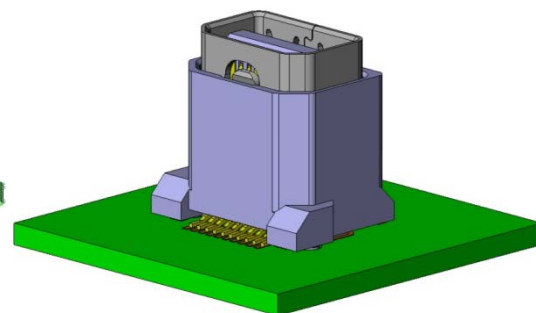
 CONNECTOR
 MB-0248-2
 July 2013

RoHS Compliant


On-board Standard



Reverse Sunk-into-the-board



Straight

The DP3 Series has been developed as an I/O connector compatible with Thunderbolt™ Technology for high-speed transmission between PCs and peripheral devices.

*Thunderbolt is a trademark of Intel Corporation in the US and other countries.

Features

- 10Gbps per lane high-speed transmission connector for Thunderbolt.
- Available in standard and reverse mounting, sunk-into-the-board, and straight mounting type. JAE has additionally developed the straight mounting type.
- Enhanced board mounting strength with through-hole hold-downs on the metal shell.
- Friction lock with the metal shell enhances cable plug retention strength and creates a clear click feeling when mated.
- Connector is supplied in embossed reel.

General Information

- | | |
|--|------------------------------------|
| ■ No. of Contacts: 20 | ■ Rated Current: 0.5A (signal pin) |
| ■ Contact Resistance: 100m Ω max. | ■ Insulation Resistance: 10MΩ min. |
| ■ Dielectric Withstanding Voltage: AC300Vr.m.s for 1 minute | ■ Durability: 10,000 mating cycles |
| ■ Operating Temperature: -20 Deg. C to +85 Deg. C | |

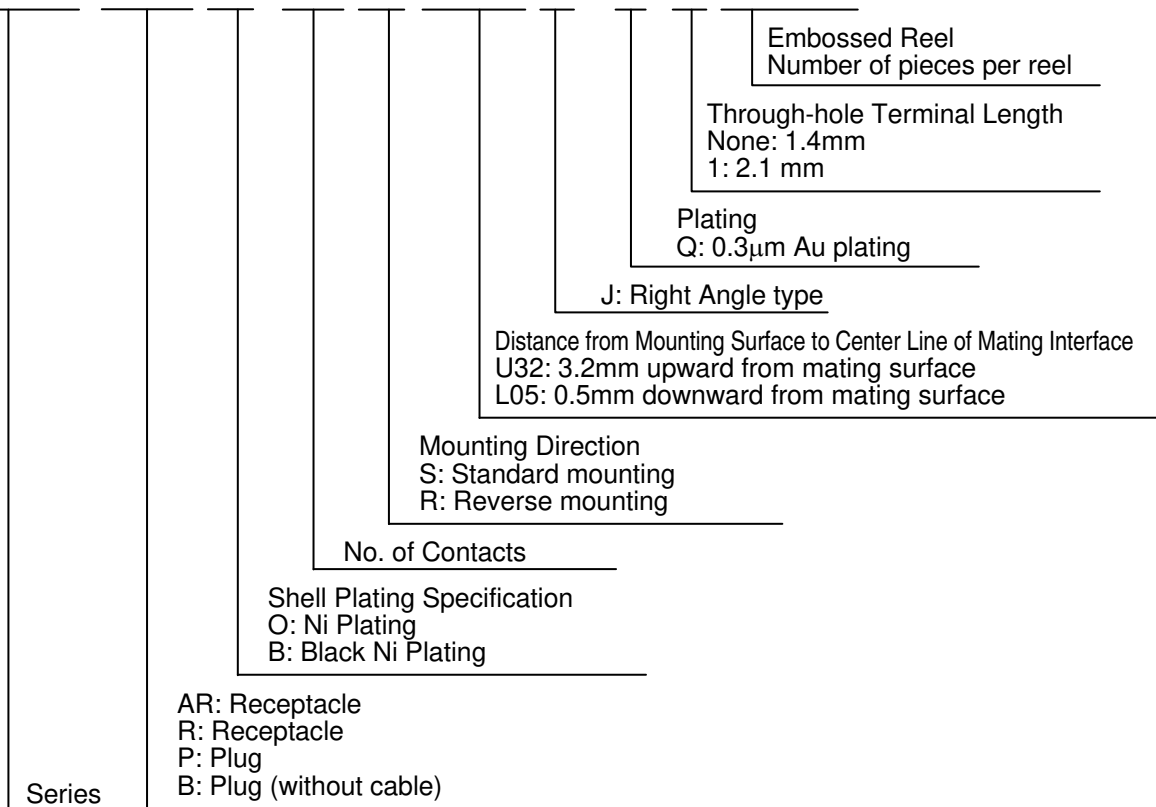
Materials and Finishes

| Component | Material / Finish |
|-----------|--|
| Contact | Copper alloy / 0.3μ min. Au plating over Ni (contact area) Sn plating over Ni (terminal area) |
| Housing | Glass filled LCP / None |
| Shell | Stainless steel / Ni |

Ordering Information

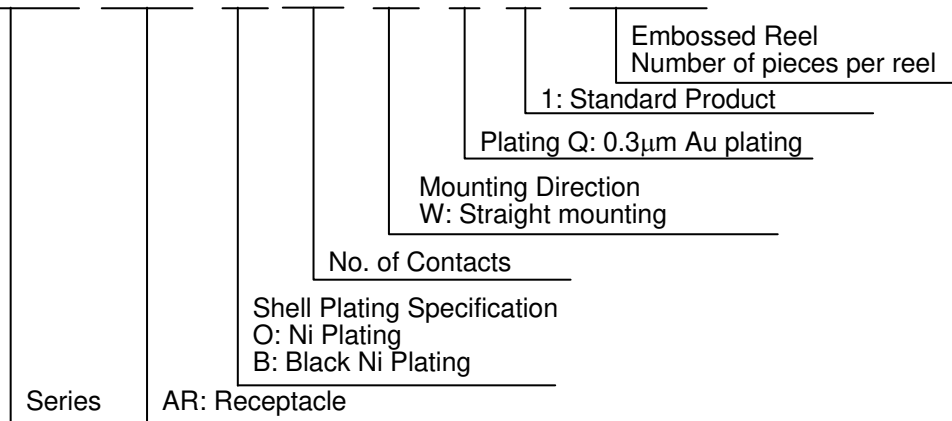
(On-board, Sunk-into-board)

DP3 A R 0 20 S U32 J Q 1 R****



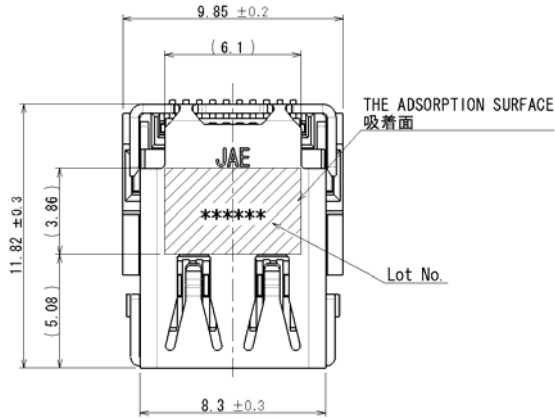
(Straight)

DP3 A R 0 20 W Q 1 R****

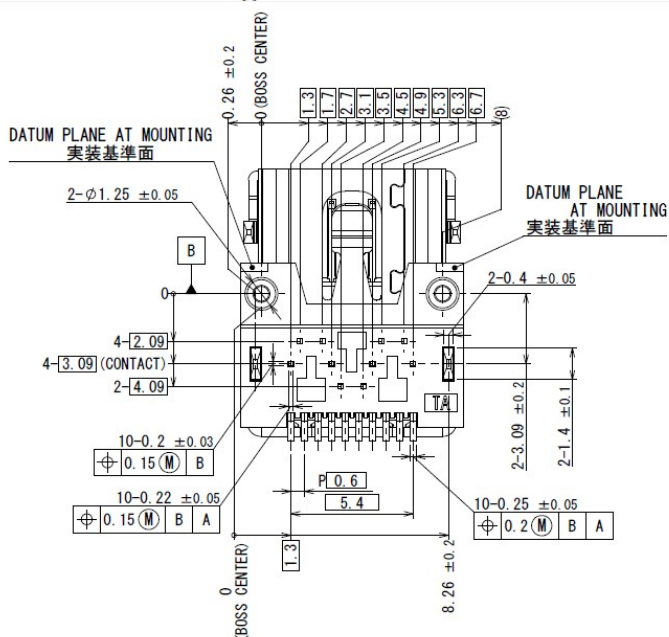
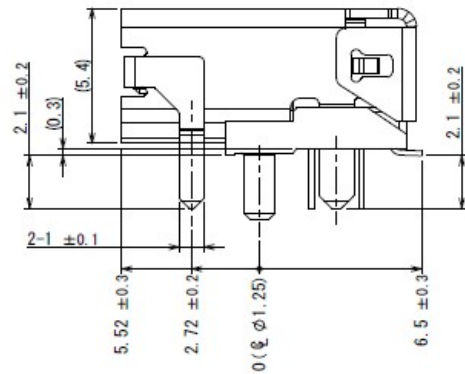
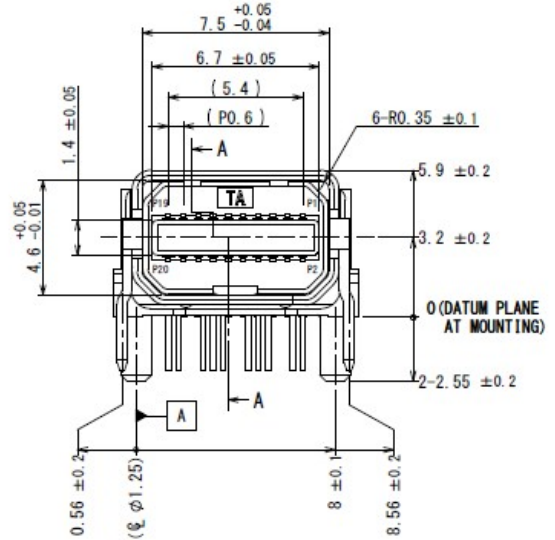


| | |
|--|----------------|
| Part Number | SJ Drawing No. |
| DP3AR020SU32JQ1 (Individual Connector) | SJ113423 |
| DP3AR020SU32JQ1R400 (Embossed Reel) | SJ113424 |

On-board
Standard Type

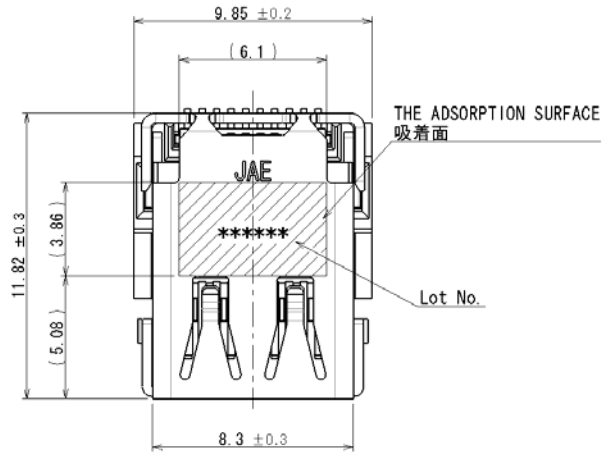


Unit: mm

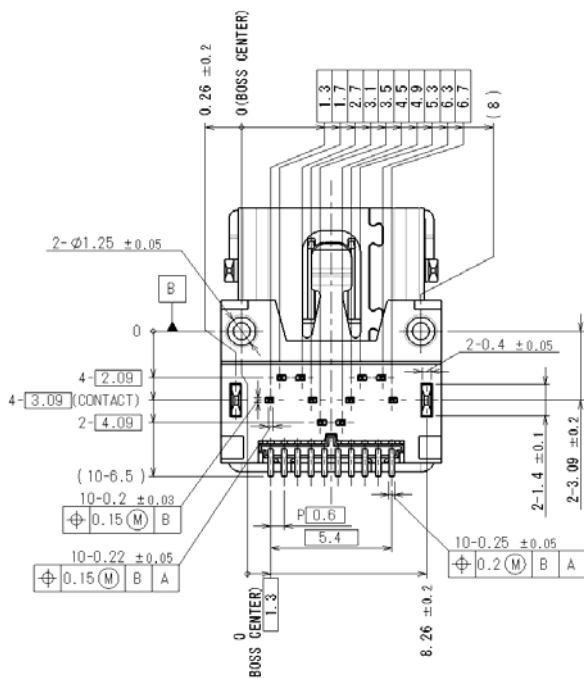
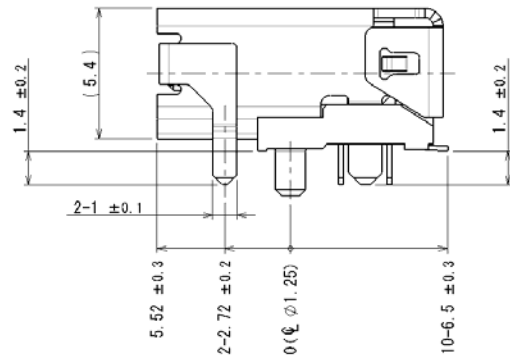
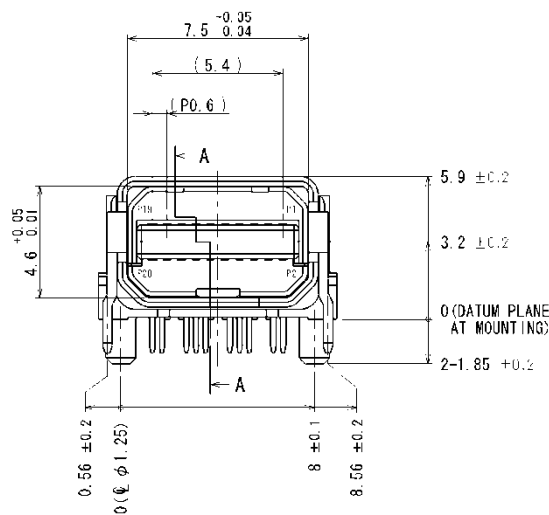


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|--------------------------------------|----------------|
| Part Number | SJ Drawing No. |
| DP3R020SU32JQ (Individual Connector) | SJ112287 |
| DP3R020SU32JQR400 (Embossed Reel) | SJ112331 |

On-board
Standard Type

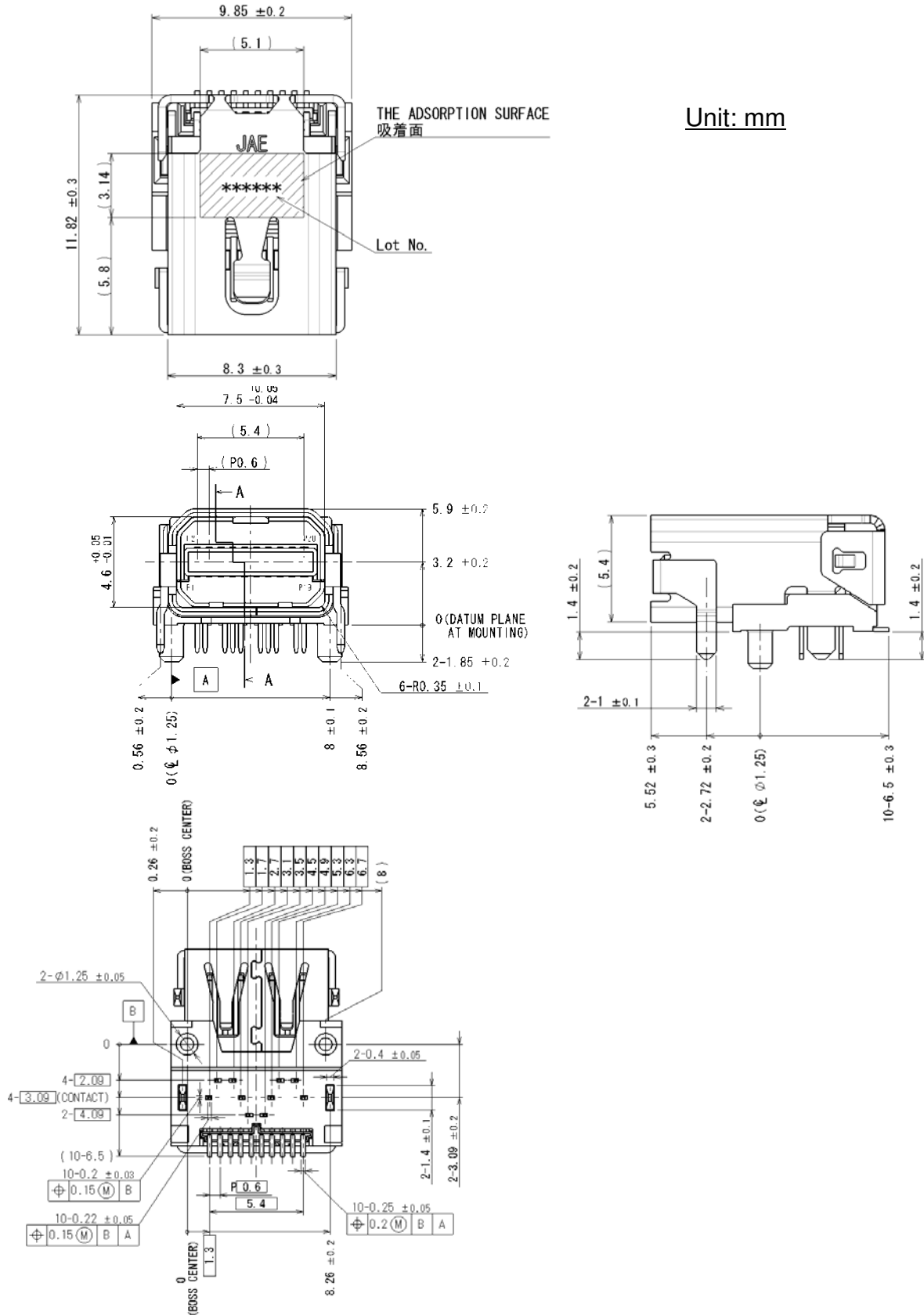


Unit: mm



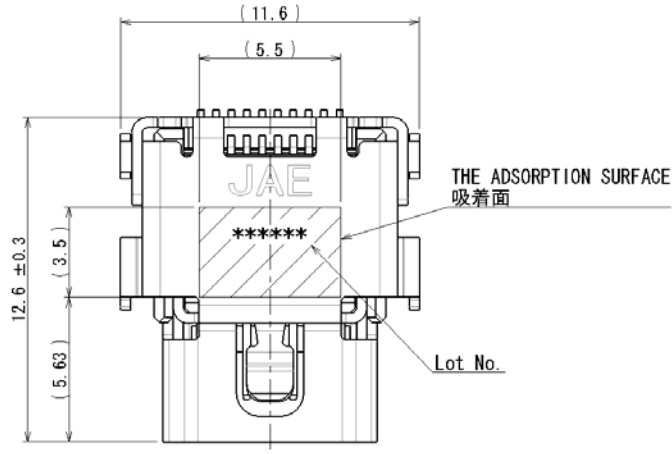
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|--------------------------------------|----------------|
| Part Number | SJ Drawing No. |
| DP3R020RU32JQ (Individual Connector) | SJ112289 |
| DP3R020RU32JQR400 (Embossed Reel) | SJ112333 |

On-board
Reverse Type

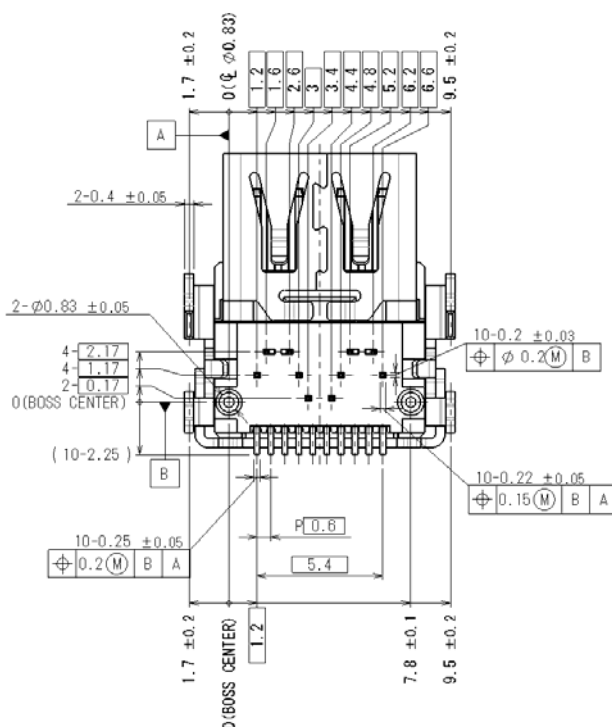
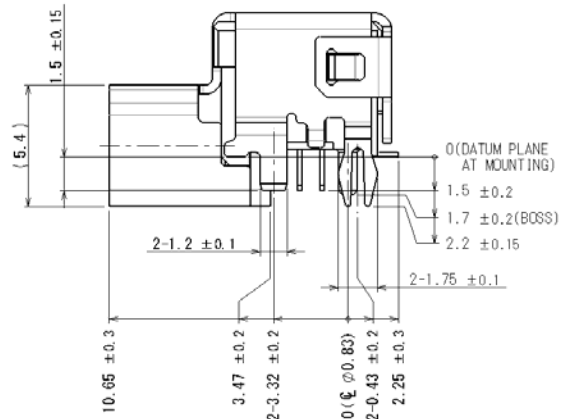
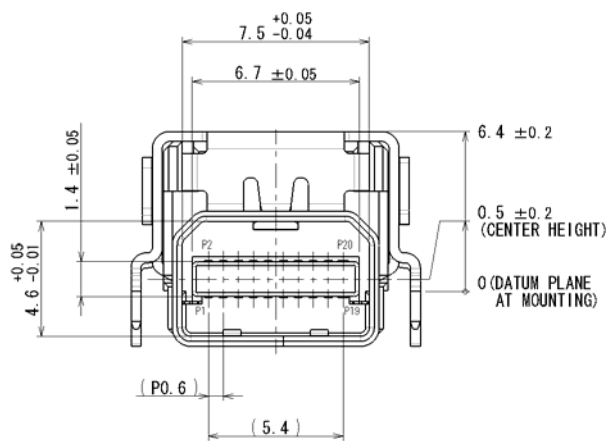


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|--------------------------------------|----------------|
| Part Number | SJ Drawing No. |
| DP3RB20RU05JQ (Individual Connector) | SJ112304 |
| DP3RB20RU05JQR400 (Embossed Reel) | SJ112336 |

Sunk-into-the-board
Reverse Type



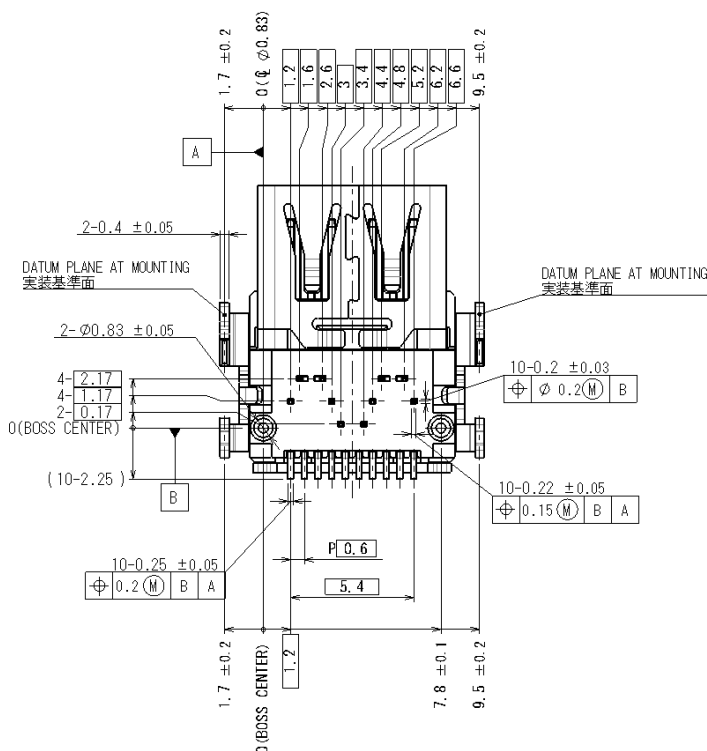
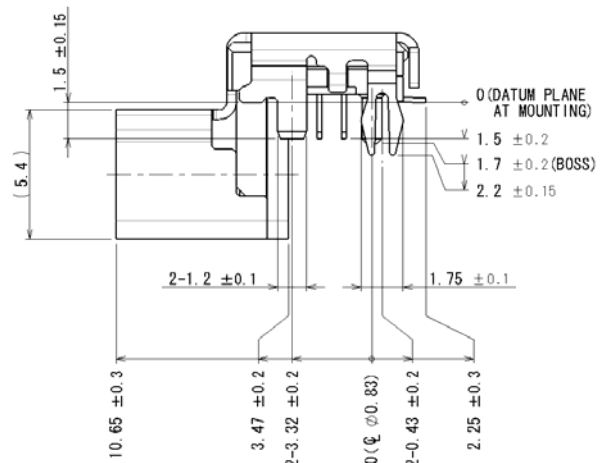
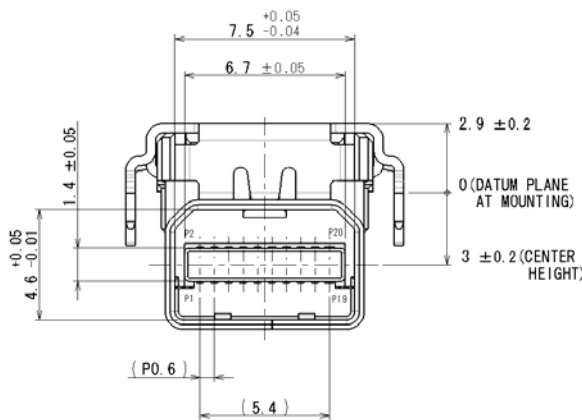
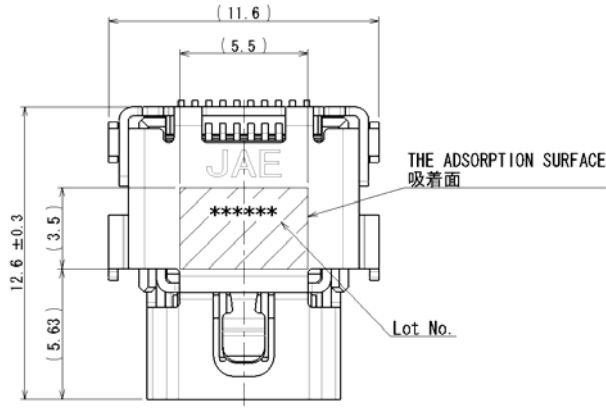
Unit: mm



| | |
|--------------------------------------|----------------|
| Part Number | SJ Drawing No. |
| DP3R020RL30JQ (Individual Connector) | SJ112303 |
| DP3R020RL30JQR400 (Embossed Reel) | SJ112335 |

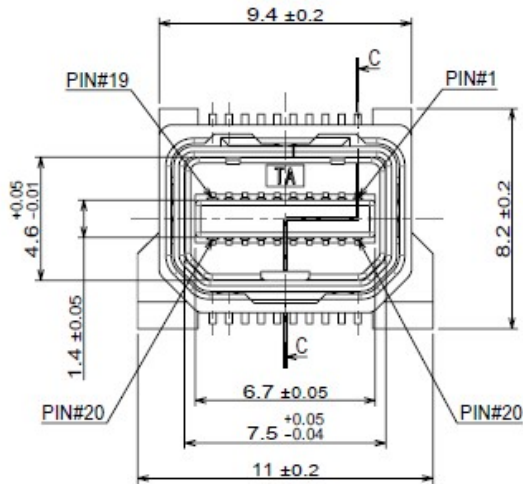
Sunk-into-the-board
Reverse Type

Unit: mm

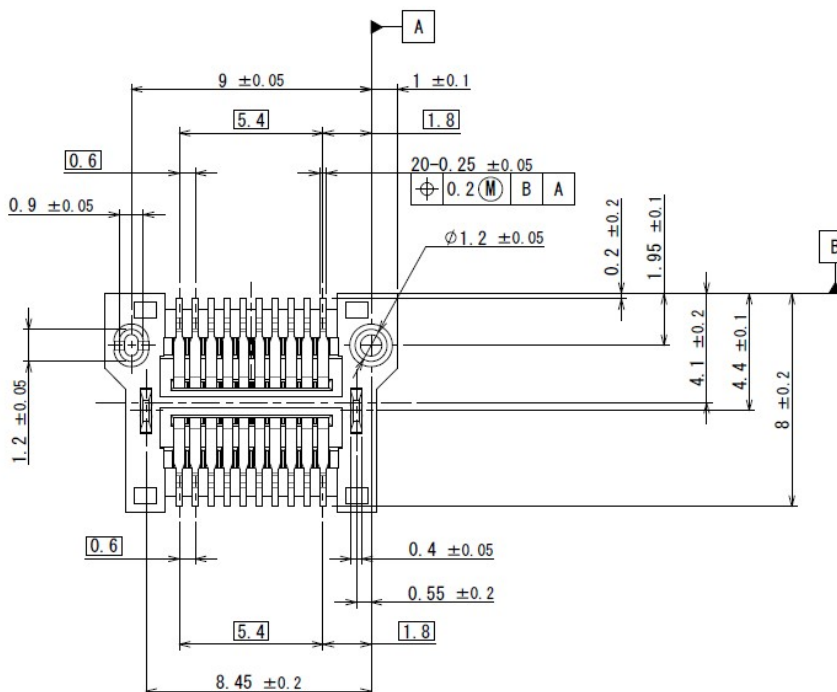
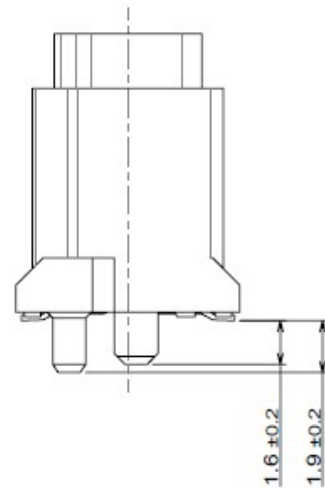
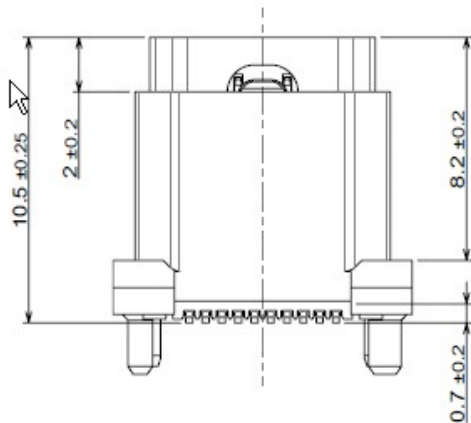


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|------------------------------------|----------------|
| Part Number | SJ Drawing No. |
| DP3AR020WQ1 (Individual Connector) | SJ114076 |
| DP3AR020WQ1R400 (Embossed Reel) | SJ114077 |

On-board
Straight Type



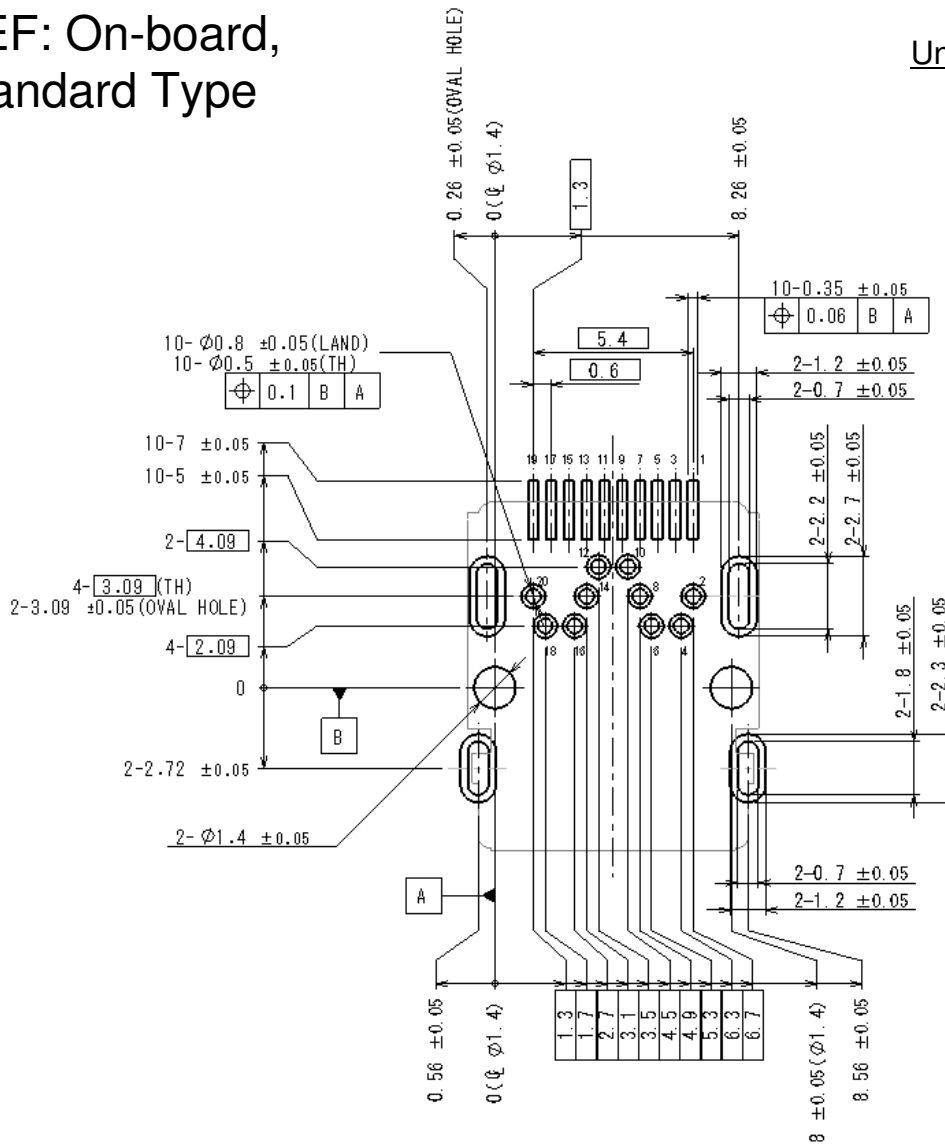
Unit: mm



Applicable Dimensions of Board

REF: On-board,
Standard Type

Unit: mm



APPLICABLE P.C.B DIMENSION (REF.)
適合基板寸法 (参考)

| |
|-----------------|
| Product Line-up |
|-----------------|

Horizontal Receptacles

| Receptacle Type | Mounting Orientation | Height of Mating Centerline (from mounting surface) | Through-hole Pin Length | Part Number | SJ No. |
|-----------------|----------------------|---|-------------------------|-----------------|---|
| Standard (top) | Standard | + 3.2mm | 2.1mm | DP3AR020SU32JQ1 | SJ113423 (Individual Connector) SJ113424 (Embossed Reel) |
| Standard (top) | Standard | + 3.2mm | 1.4mm | DP3R020SU32JQ | SJ112287 (Individual Connector) SJ112331 (Embossed Reel) |
| Reverse | Reverse | + 3.2mm | 2.1mm | DP3R020RU32JQ1 | SJ112290 (Individual Connector) SJ112334 (Embossed Reel) |
| Reverse | Reverse | + 3.2mm | 1.4mm | DP3R020RU32JQ | SJ112289 (Individual Connector) SJ113424 (Embossed Reel) |
| Mid-mount | Reverse | - 3.0mm | 1.5mm | DP3R020RL30JQ | SJ112303 (Individual Connector) SJ112335 (Embossed Reel) |
| Mid-mount | Reverse | + 0.5mm | 1.5mm | DP3RB20RU05JQ | SJ112304 (Individual Connector) SJ112336 (Embossed Reel) |

Vertical Receptacles

| Receptacle Type | Contact Mounting | Hold-downs | Height | Part Number | SJ No. |
|-----------------|------------------|---------------------|--------|-------------|---|
| Vertical | All SMT | Through-hole, 1.9mm | 10.5mm | DP3AR020WQ1 | SJ114076 (Individual Connector) SJ114077 (Embossed Reel) |

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

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

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