

**NEW**



0.8mm Pitch Stacking Type Board-to-Board Connector CONNECTOR  
( for Internal Connection)

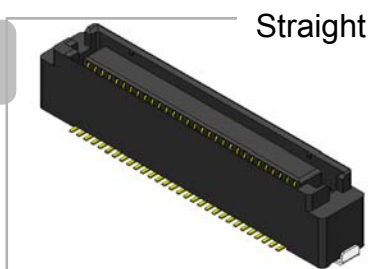
MB-0315-1

November 2016

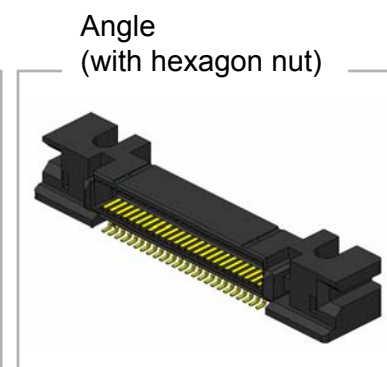
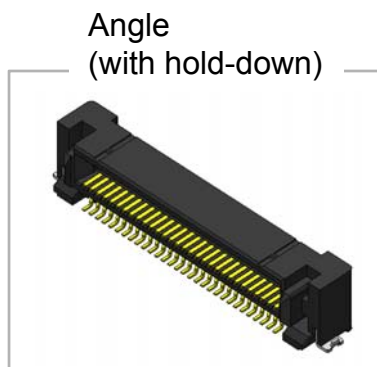
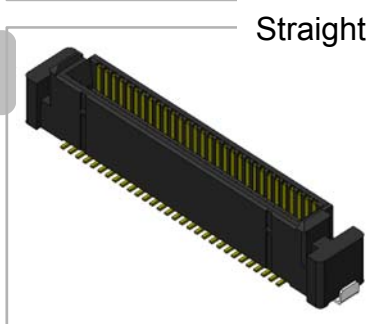
## KX14/15 Series

**RoHS Compliant**

Receptacle



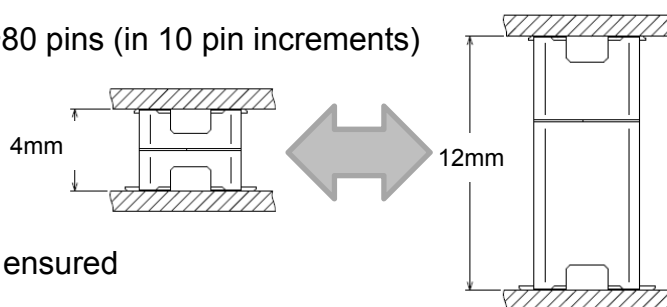
Plug



Industrial equipment, office automation equipment, and communication devices are becoming ever more compact and increasingly multifunctional. With these trends, there is an accompanying demand for the variety of connection configurations of general purpose connectors to be more diverse. JAE has enhanced the product lineup of the widely used KX14/15 Series board-to-board connector by expanding the range of the horizontal board spacing that can be implemented. The spacing variations now cover a range of 4mm to 12mm, and are available as standard products in pin counts from 20 to 80 pins, in 10 pin increments.

### Features

- Broad product lineup: 0.8mm Pitch, 2 row, 20~80 pins (in 10 pin increments) stacking height 4-12mm (in 1mm increments)
- High contact reliability: Ribbon type contact resistant to twisting.
- Easy insertion operability: Ensured with mating guide.
- Precise mounting on board: Mounting position ensured with boss on bottom of connector.
- Secure board retention: Metal hold-downs on both sides enhance board retention during mating and unmating. Products with hexagonal nut for thread fastening are available.



### General Specifications

- Number of Contacts: 20, 30, 40, 50, 60, 70, 80
- Pitch: 0.8mm, 2 row
- Operating Temperature: -40 Deg. C ~ + 85 Deg. C
- Contact Resistance: 70m Ω max.
- Mating Cycles: 500 times
- Rated Current: 0.5A / 1 position
- Rated Voltage: AC200V, DC300V
- Insulation Resistance: 100MΩ min. (initial)
- Dielectric Withstanding Voltage: AC500Vr.m.s. for 1 minute

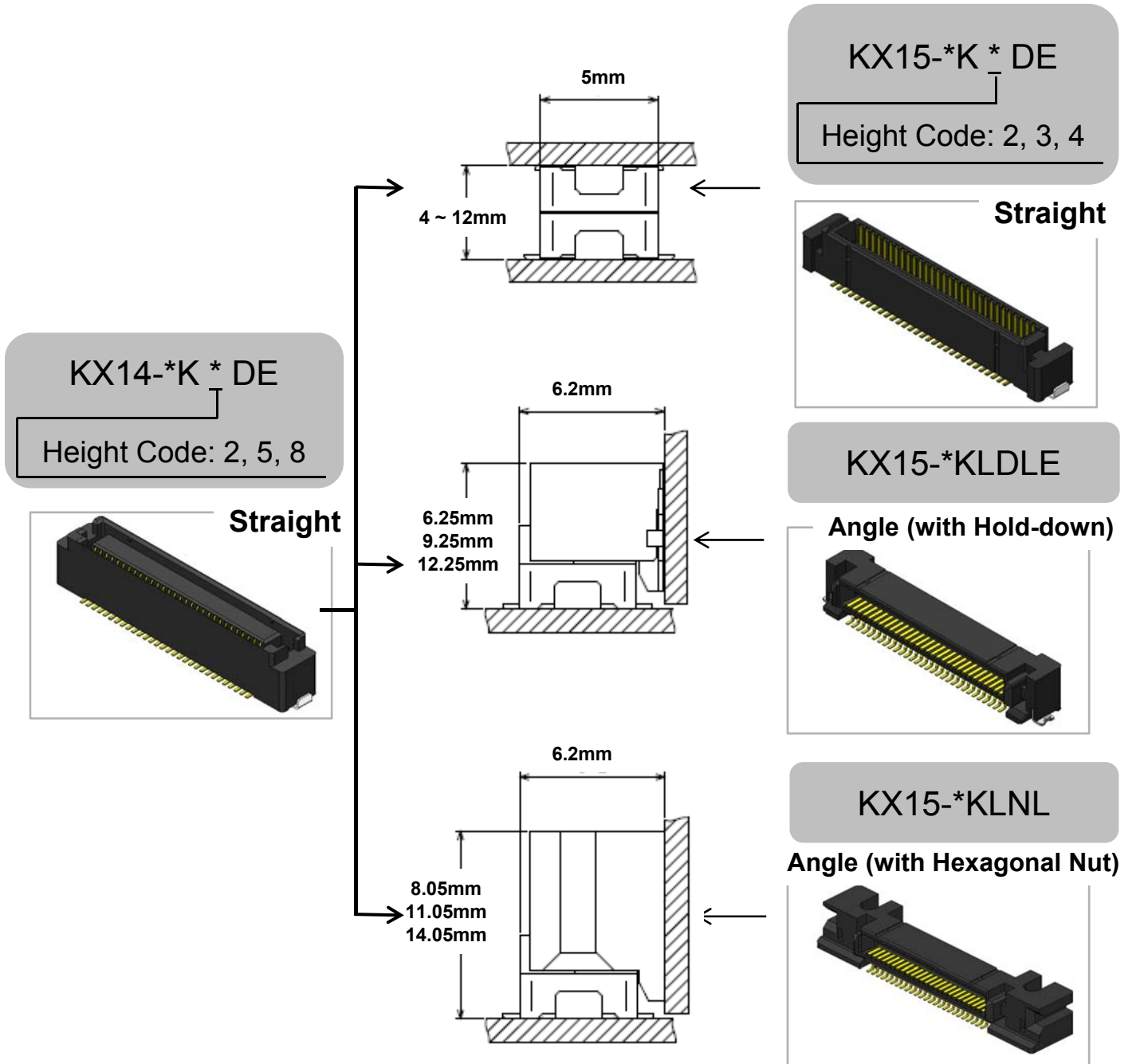
Materials and Finishes

| Items         | Material and Finish  |
|---------------|--|
| Contact       | Contact area: Copper alloy / 0.1μm min. Au plating over Ni<br>Terminal area: Copper alloy / Au flash plating over Ni |
| Insulator     | Synthetic resin (UL94V-0, Black)   |
| Hold-down     | Copper alloy / Sn plating over Ni  |
| Hexagonal Nut | Brass / Nickel plating   |

Type / Combination / Mating Dimensions

■ Receptacle: KX14

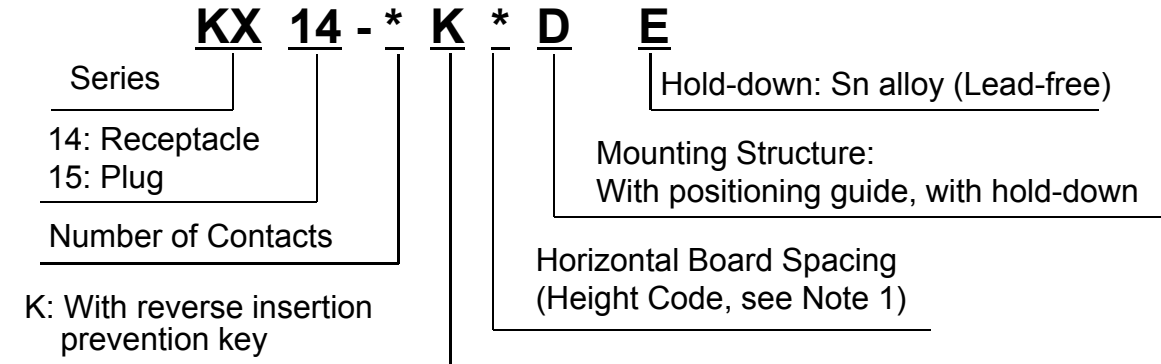
■ Plug: KX15



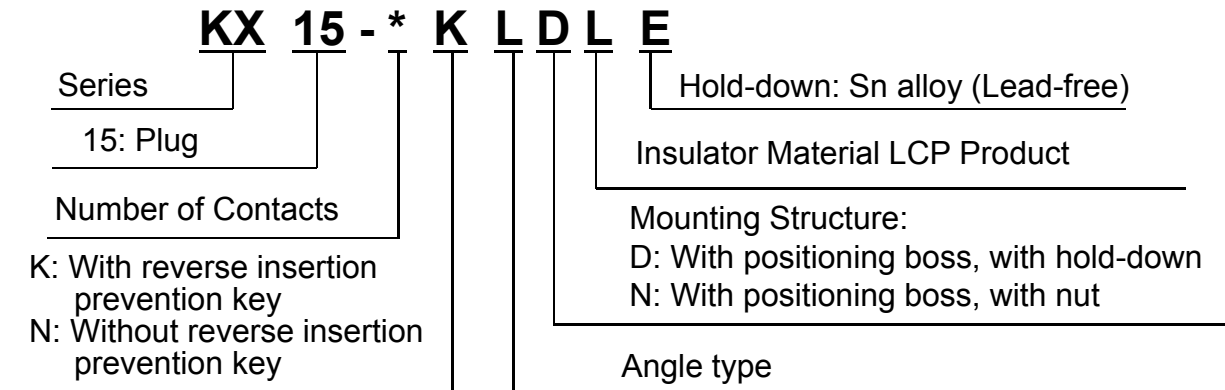
Ordering Information

1. Individual Product

Straight Type



Angle Type



2. Embossed Packaging Product

When ordering Embossed Packaging Products, replace “E” at the end of the Part Number of the Individual Product with “- E (packaged amount) E”.

For example: the embossed tape reel part number for the KX14-20K2DE containing 1,000 pieces will be KX14-20K2D-E1000E.

Embossed tape reels containing 650 pieces are also available. Please refer to drawings for details.

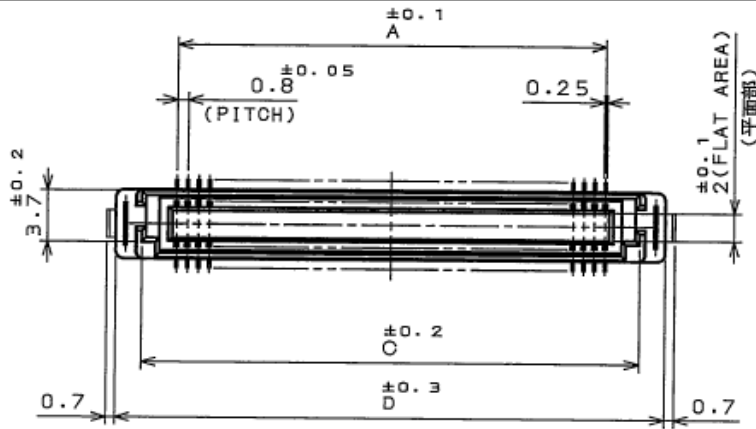
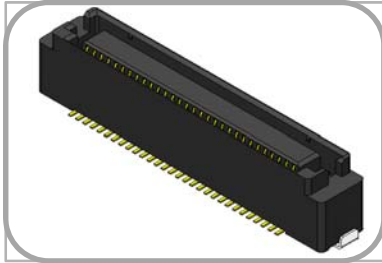
Note 1: How to Confirm Mating Dimensions

The straight receptacle and straight plug are each available in 3 insulator types, as shown below. Board spacing can be selected in the range 4 to 12mm (in 1mm increments).

For example: the mating height code for the combination of KX14-20K5DE and KX15-20K3DE are “5” and “3”, so the board spacing dimension will be 5 + 3 = 8 mm.

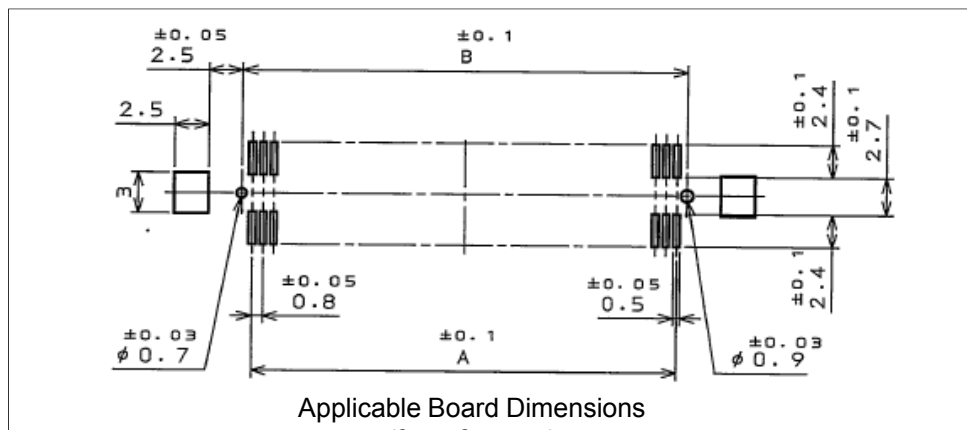
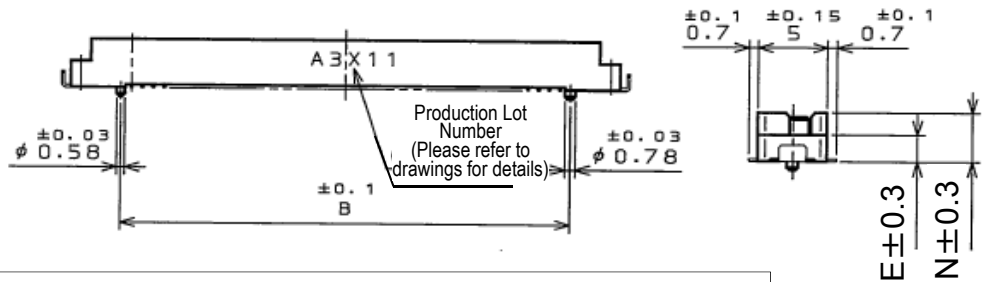
|              |   | Receptacle KX14    |     |      |   |
|--------------|---|--------------------|-----|------|---|
|              |   | Mating Height Code | 2   | 5    | 8 |
| Plug<br>KX15 | 2 | 4mm                | 7mm | 10mm |   |
|              | 3 | 5mm                | 8mm | 11mm |   |
|              | 4 | 6mm                | 9mm | 12mm |   |

# KX14 Receptacle (Height Code: 2, 5, 8) Straight, SMT Type (with Hold-down)



**Dimensions E, N**

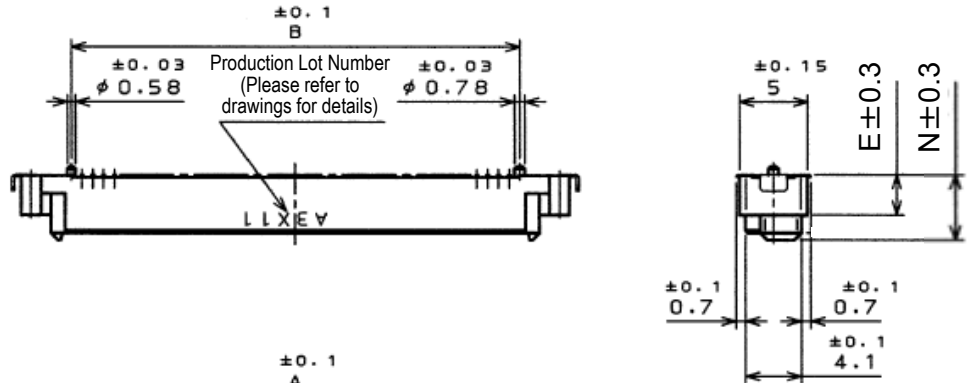
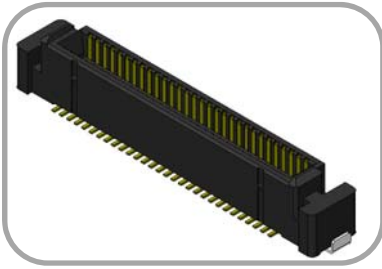
| Height Code | E    | N    |
|-------------|------|------|
| 2           | 1.95 | 3.55 |
| 5           | 4.95 | 6.55 |
| 8           | 7.95 | 9.55 |



| Number of Contacts | Part Number (Individual Product) |                          |                          | A (mm) | B (mm) | C (mm) | D (mm) |
|--------------------|----------------------------------|--------------------------|--------------------------|--------|--------|--------|--------|
|                    | 2D Type (Height Code: 2)         | 5D Type (Height Code: 5) | 8D Type (Height Code: 8) |        |        |        |        |
| 20                 | KX14-20K2DE                      | KX14-20K5DE              | KX14-20K8DE              | 7.2    | 8.7    | 12.3   | 16     |
| 30                 | KX14-30K2DE                      | KX14-30K5DE              | KX14-30K8DE              | 11.2   | 12.7   | 16.3   | 20     |
| 40                 | KX14-40K2DE                      | KX14-40K5DE              | KX14-40K8DE              | 15.2   | 16.7   | 20.3   | 24     |
| 50                 | KX14-50K2DE                      | KX14-50K5DE              | KX14-50K8DE              | 19.2   | 20.7   | 24.3   | 28     |
| 60                 | KX14-60K2DE                      | KX14-60K5DE              | KX14-60K8DE              | 23.2   | 24.7   | 28.3   | 32     |
| 70                 | KX14-70K2DE                      | KX14-70K5DE              | KX14-70K8DE              | 27.2   | 28.7   | 32.3   | 36     |
| 80                 | KX14-80K2DE                      | KX14-80K5DE              | KX14-80K8DE              | 31.2   | 32.7   | 36.3   | 40     |

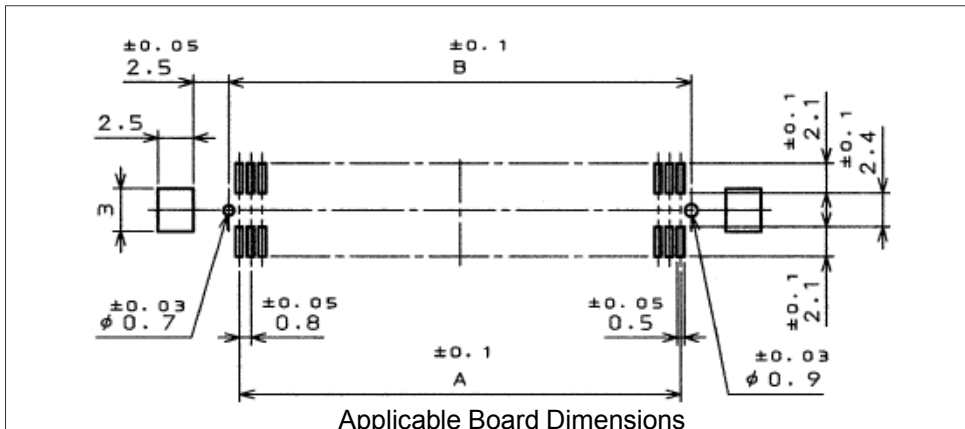
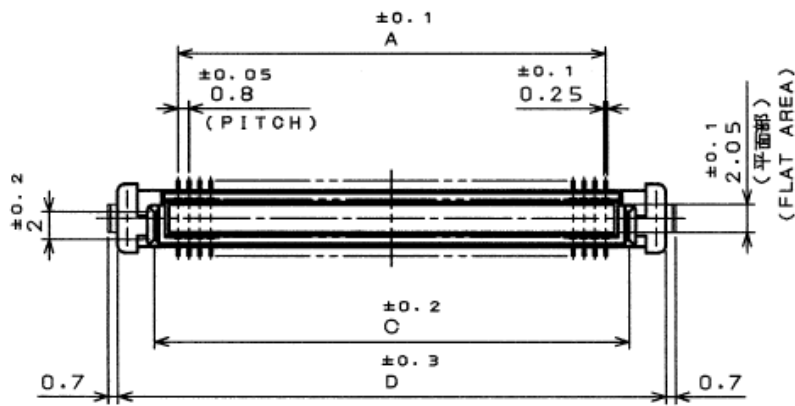
Note: Please contact us concerning pin counts and modified products other than above.

# KX15 Plug (Height Code: 2, 3, 4) Straight, SMT Type (with Hold-down)



Dimensions E, N

| Height Code | E    | N    |
|-------------|------|------|
| 2           | 1.95 | 3.75 |
| 3           | 2.95 | 4.75 |
| 4           | 3.95 | 5.75 |

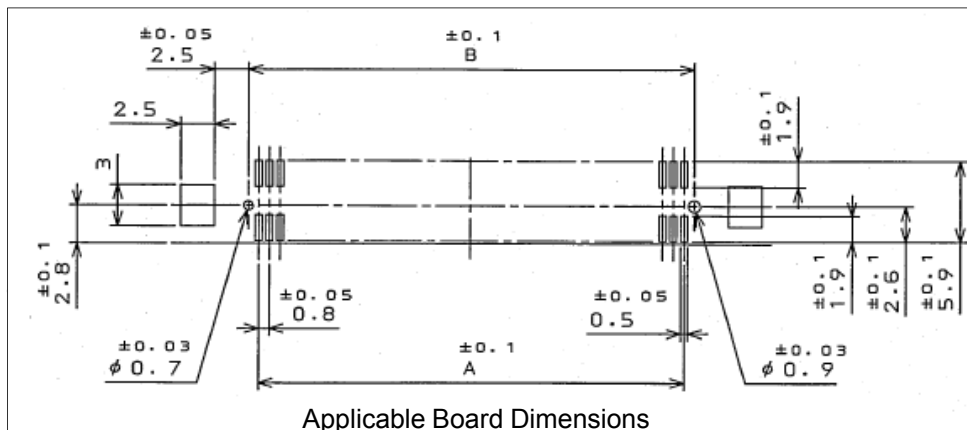
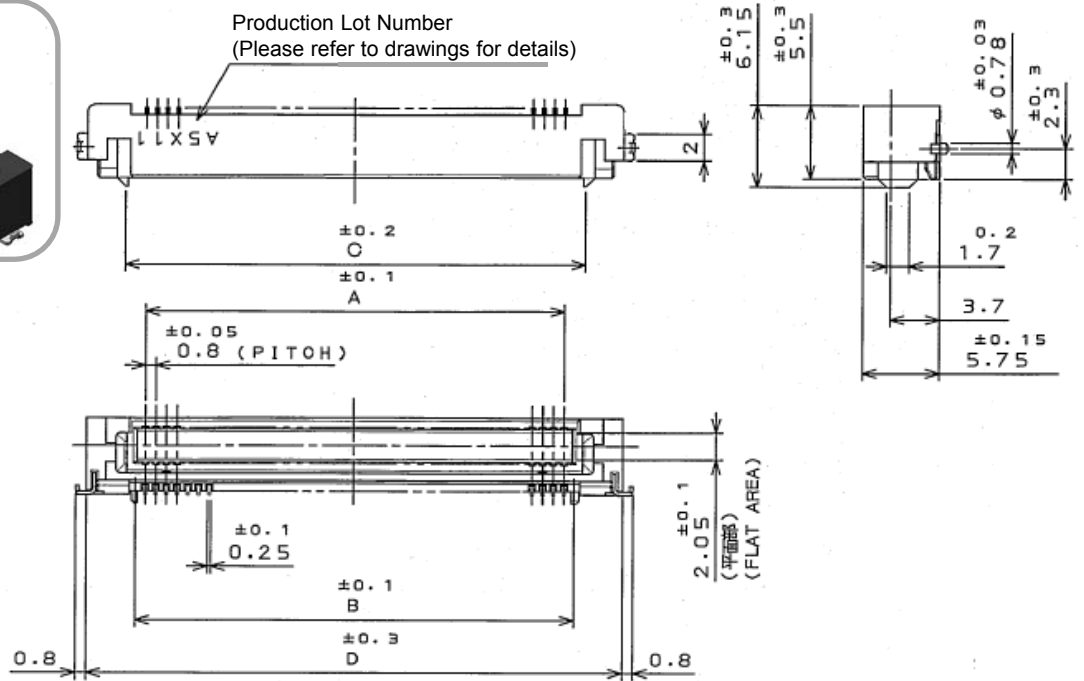
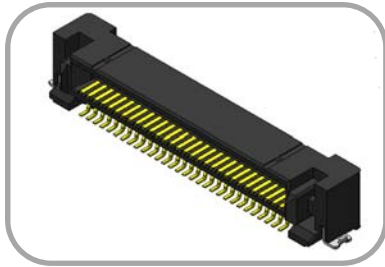


Applicable Board Dimensions  
(for reference)

| Number of Contacts | Part Number (Individual Product) |                          |                          | A (mm) | B (mm) | C (mm) | D (mm) |
|--------------------|----------------------------------|--------------------------|--------------------------|--------|--------|--------|--------|
|                    | 2D Type (Height Code: 2)         | 3D Type (Height Code: 3) | 4D Type (Height Code: 4) |        |        |        |        |
| 20                 | KX15-20K2DE                      | KX15-20K3DE              | KX15-20K4DE              | 7.2    | 8.7    | 10.6   | 16     |
| 30                 | KX15-30K2DE                      | KX15-30K3DE              | KX15-30K4DE              | 11.2   | 12.7   | 14.6   | 20     |
| 40                 | KX15-40K2DE                      | KX15-40K3DE              | KX15-40K4DE              | 15.2   | 16.7   | 18.6   | 24     |
| 50                 | KX15-50K2DE                      | KX15-50K3DE              | KX15-50K4DE              | 19.2   | 20.7   | 22.6   | 28     |
| 60                 | KX15-60K2DE                      | KX15-60K3DE              | KX15-60K4DE              | 23.2   | 24.7   | 26.6   | 32     |
| 70                 | KX15-70K2DE                      | KX15-70K3DE              | KX15-70K4DE              | 27.2   | 28.7   | 30.6   | 36     |
| 80                 | KX15-80K2DE                      | KX15-80K3DE              | KX15-80K4DE              | 31.2   | 32.7   | 34.6   | 40     |

Note: Please contact us concerning pin counts and modified products other than above.

# KX15 Plug Right Angle, SMT Type (with Hold-down)

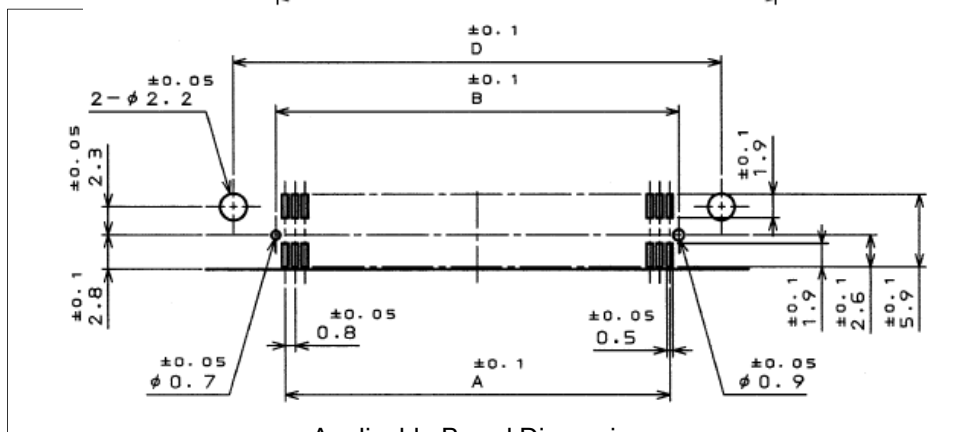
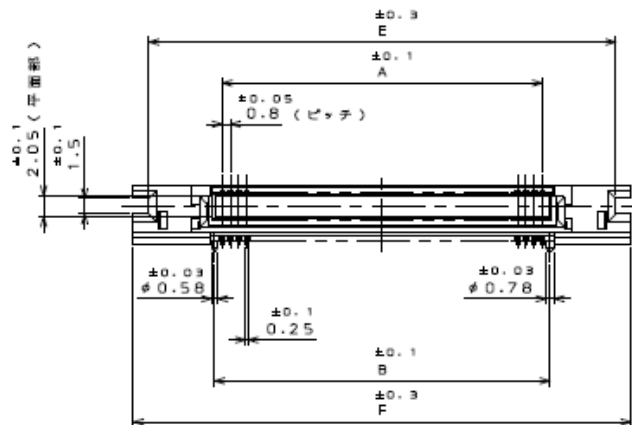
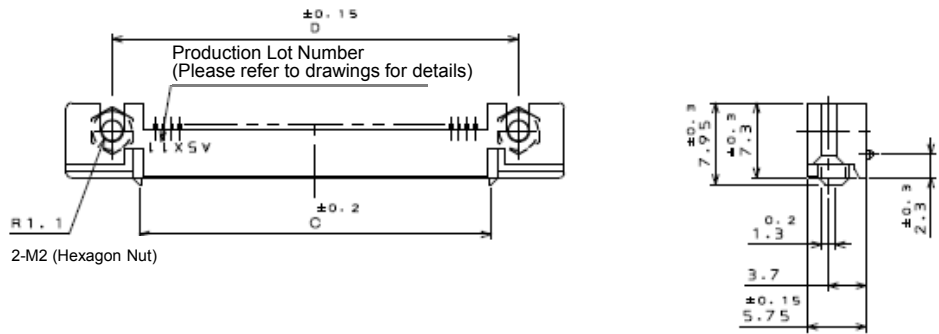
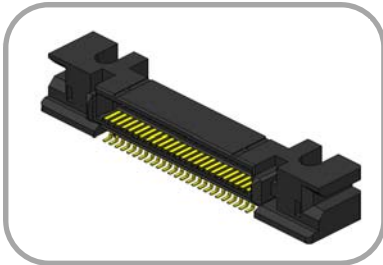


Applicable Board Dimensions  
(for reference)

| Number of Contacts | Part Number (Individual Product) | A (mm) | B (mm) | C (mm) | D (mm) |
|--------------------|----------------------------------|--------|--------|--------|--------|
| 20                 | KX15-20KLDLE                     | 7.2    | 8.7    | 10.3   | 16     |
| 30                 | KX15-30KLDLE                     | 11.2   | 12.7   | 14.3   | 20     |
| 40                 | KX15-40KLDLE                     | 15.2   | 16.7   | 18.3   | 24     |
| 50                 | KX15-50KLDLE                     | 19.2   | 20.7   | 22.3   | 28     |
| 60                 | KX15-60KLDLE                     | 23.2   | 24.7   | 26.3   | 32     |
| 70                 | KX15-70KLDLE                     | 27.2   | 28.7   | 30.3   | 36     |
| 80                 | KX15-80KLDLE                     | 31.2   | 32.7   | 34.3   | 40     |

Note: Please contact us concerning pin counts and modified products other than above.

# KX15 Plug Right Angle, SMT Type (with Hexagonal Nut)



Applicable Board Dimensions  
(for reference)

| Number of Contacts | Part Number (Individual Product) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) |
|--------------------|----------------------------------|--------|--------|--------|--------|--------|--------|
| 50                 | KX15-50KLNL                      | 19.2   | 20.7   | 22.3   | 28     | 33.5   | 36.5   |
| 70                 | KX15-70KLNL                      | 27.2   | 28.7   | 30.3   | 36     | 41.5   | 44.5   |
| 80                 | KX15-80KLNL                      | 31.2   | 32.7   | 34.3   | 40     | 45.5   | 48.5   |

Note: Please contact us concerning pin counts and modified products other than above.



|                     |
|---------------------|
| Technical Documents |
|---------------------|

|                              |                                       |  |
|------------------------------|---------------------------------------|--|
| Straight Receptacle Drawings | 1.                                    | KX14-*K2DE (SJ037994), -E1000E (SJ038008)  |
|                              | 2.                                    | KX14-*K5DE (SJ037995), -E1000E (SJ038011)  |
|                              | 3.                                    | KX14-*K8DE (SJ038007), -E850E (SJ038010)   |
| Straight Plug Drawings       | 4.                                    | KX15-*K2DE (SJ037325), -E1000E (SJ038104)  |
|                              | 5.                                    | KX15-*K3DE (SJ038088), -E1000E (SJ038103)  |
|                              | 6.                                    | KX15-*K4DE (SJ038089), -E1000E (SJ038105)  |
| Angle Plug Drawings          | 7.                                    | KX15-*KLDLE (SJ038123), -E1000E (SJ038124) |
|                              | 8.                                    | KX15-*KLNL (SJ030357), -E1000 (SJ033420)   |
| Specifications               | JACS-1401-501                         |  |
| Handling Instructions        | JAHL-1401                             |  |
| Test Report                  | Straight: SR-C-0551, Angle: SR-C-0645 |  |

**Notice:**

- 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.
- 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.
- 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.
  - Applications that require consultation:
    - 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.
    - 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.
  - 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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