

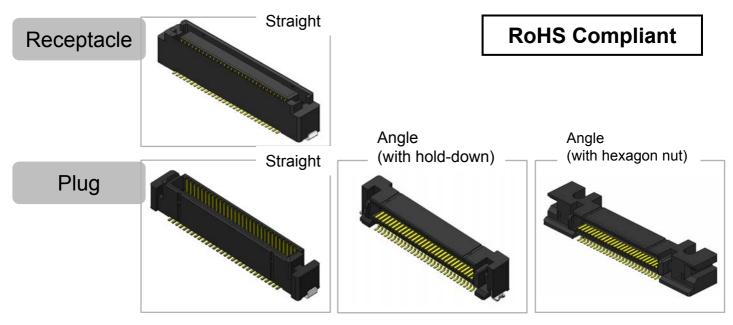


0.8mm Pitch Stacking Type Board-to-Board Connector CONNECTOR (for Internal Connection)

MB-0315-1

## KX14/15 Series

November 2016



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.

4mm

### **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

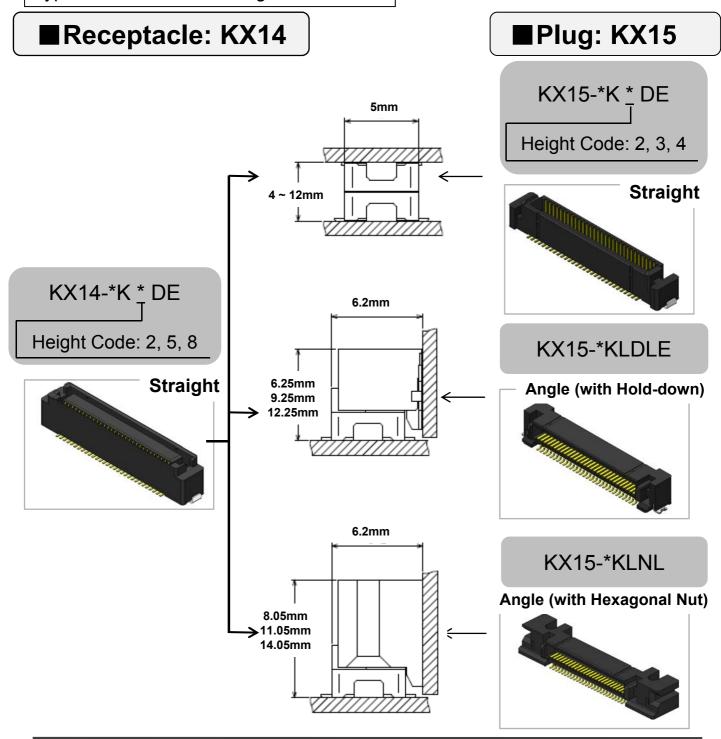


12mm

### Materials and Finishes

Items	Material and Finish			
Contact	Contact area: Copper alloy / 0.1µm min. Au plating over l 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			

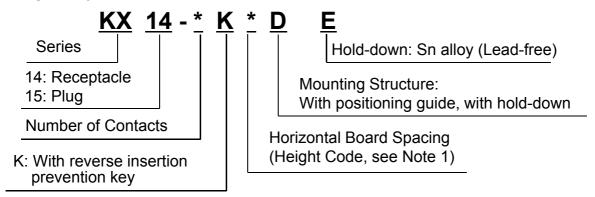
Type / Combination / Mating Dimensions



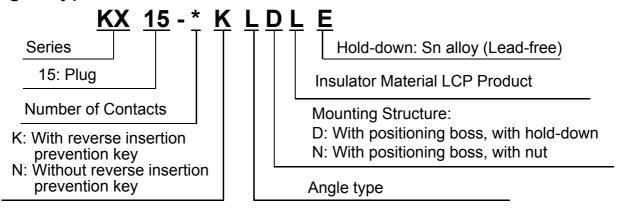
### **Ordering Information**

#### 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.

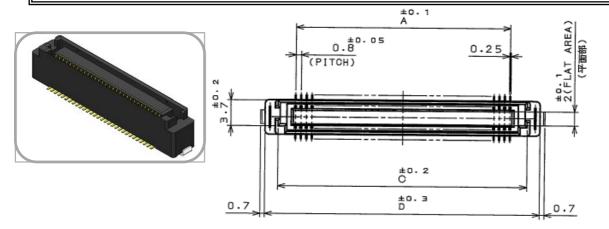
## Note 1: How to Confirm Mating Dimensions

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 KX14-20K $\underline{5}$ DE and KX15-20K $\underline{3}$ DE are "5" and "3", so the board spacing dimension will be 5 + 3 = 8 mm.

	Receptacle KX14				
	Mating Height Code	2	5	8	
Plug 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)



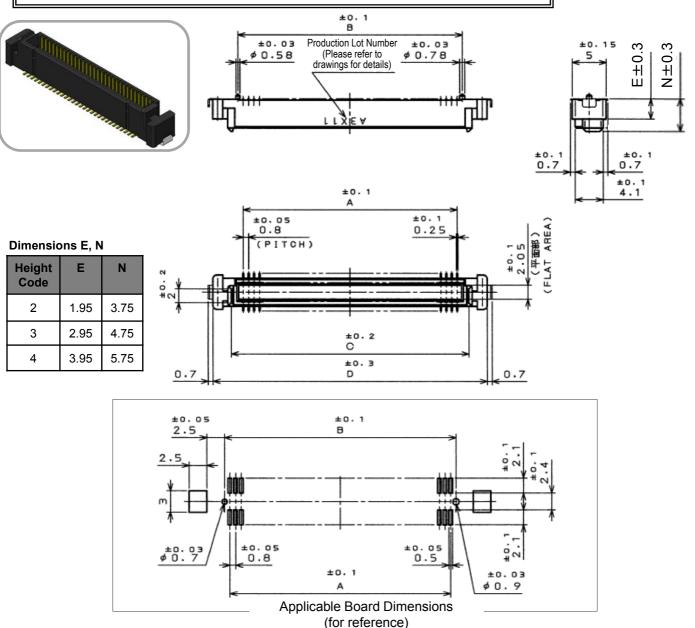
#### Dimensions E, N

Dimensions E,	IN			-
Height Code	Е	N	±0.1 ±0.15 ±0	. 1
2	1.95	3.55	A3X11	
5	4.95	6.55	Production Let III	<u>, ¥</u>
8	7.95	9.55	#0.03 # 0.58   Valuable   Lot Number   Lot Number   Please refer to   Please refer	<del>*</del>
		±0.02.5 2.5 m ±0.03 \$0.7	#0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05 #0.05	N + N

Number	Part Number (Individual Product)			Α	В	С	D
of Contacts	2D Type (Height Code: 2)	5D Type (Height Code: 5)	8D Type (Height Code: 8)	(mm)	(mm)	(mm)	(mm)
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

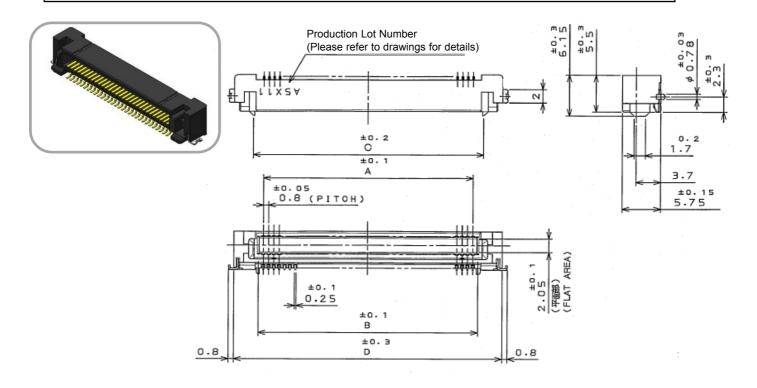
(for reference)

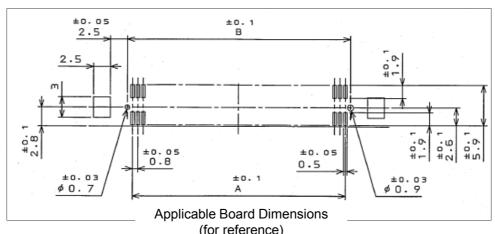
## KX15 Plug (Height Code: 2, 3, 4) Straight, SMT Type (with Hold-down)



Number of	Part Number (Individual Product)			Α	В	С	D
Contacts	2D Type (Height Code: 2)	3D Type (Height Code: 3)	4D Type (Height Code: 4)	(mm)	(mm)	(mm)	(mm)
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

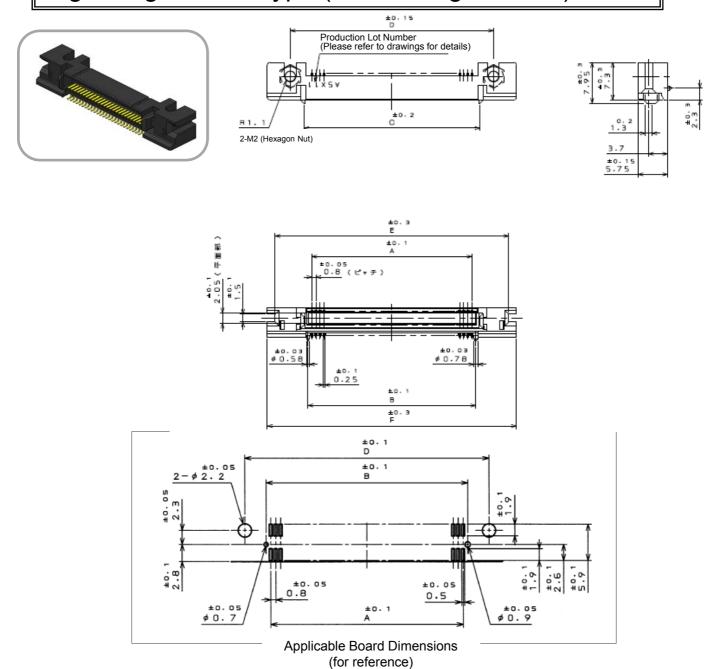
# KX15 Plug Right Angle, SMT Type (with Hold-down)





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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

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



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

### **Technical Documents**

Straight	1.	KX14-*K2DE (SJ037994), -E1000E (SJ038008)				
Receptacle	2.	KX14-*K5DE (SJ037995), -E1000E (SJ038011)				
Drawings	3.	KX14-*K8DE (SJ038007), -E850E (SJ038010)				
04 1 4 5	4.	KX15-*K2DE (SJ037325), -E1000E (SJ038104)				
Straight Plug Drawings	5.	KX15-*K3DE (SJ038088), -E1000E (SJ038103)				
Angle Plug	6.	KX15-*K4DE (SJ038089), -E1000E (SJ038105)				
	7.	KX15-*KLDLE (SJ038123), -E1000E (SJ038124)				
Drawings	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:

- 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.
- . 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,

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

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