

RoHS Compliant

# COAXIAL CONNECTORS

2008

CAT.NO.COAX-007A-E.FEB.2008

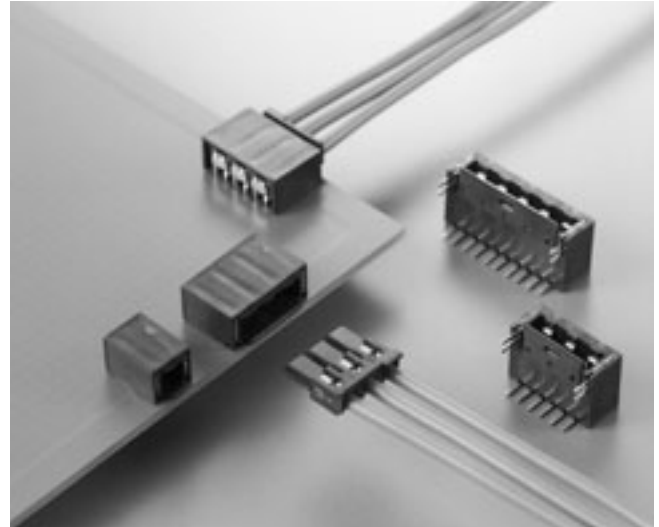
COAXIAL  
CONNECTORS

- FREQUENCY RANGE TO 300MHz
- SIMPLIFIED COAXIAL, MULTIPLETYPE

## KD10/KD20 Series

KD10/KD20 series are different from conventional single position independent coaxial connectors. The multiple simplified coaxial connectors of these series have several positions in a single housing. All cables can be mated or unmated en masse on the board. Easy to operate. Applicable to a middle/low band high frequency from DC to 300 MHz. Characteristic impedance : 50 or 75 ohm.

- Number of positions : 1,3,5,8
- Push-on feature easy to mate and unmate.
  - Simple locking mechanism with polarizing key.
- Low profile : 6.1 mm high on board
- Receptacle with kinked holdowns.
  - It facilitates temporary insertion/fitting for soldering.
- The central contact of KD20 types are plated with thick gold of 0.3  $\mu$  m or more. A higher degree of reliability with two electric contact points. Plug with heat resistant cable.
- Applications :
  - 50  $\Omega$  Type / Digital Information Equipment, Communications Equipment, Measuring Instruments, Factory Automation Equipment
  - 75  $\Omega$  Type / Image Equipment, Broadcasting Equipment, Multimedia Equipment





### SPECIFICATIONS

|                          |  |
|--------------------------|--|
| Characteristic Impedance | 50 $\Omega$ & 75 $\Omega$  |
| Frequency Range          | DC to 300MHz   |
| D. W. Voltage            | AC250Vr.m.s. (1minute)   |
| Insulation Resistance    | 100 megohms min. (DC250V)  |
| Contact Resistance       | Center Contacts : 80 milliohms max.<br>Outer Contacts : 30 milliohms max.              |
| V. S. W. R.              | 1.3 max. (DC to 300MHz)  |
| Applicable Cables        | 50 $\Omega$ : 0.8D-IEV(LF)<br>For KD20/CO-6F-SB-CX50<br>75 $\Omega$ : 0.8CV-E41447(LF) |

### MATERIALS/FINISHES

| Description | Materials/Finishes  |
|-------------|---|
| Contacts    | Copper Alloy/Gold Plated<br>(Gold Plated Thickness :<br>KD10 $\cdots$ 0.1 $\mu$ m min.KD20 $\cdots$ 0.3 $\mu$ m min.) |
| Insulator   | Glass-filled 6-6Nylon   |
| Hold-down   | Copper Alloy/Tin Plated   |

### Types and Combinations

| Receptacle  | Plug   |
|---|--|
| <ul style="list-style-type: none"> <li>● Through-hole Solder Right-angle</li> <li>P/N : KD*-RRP*-F-0</li> </ul> | <ul style="list-style-type: none"> <li>● Straight Cable Assembly</li> <li>P/N : KD*-C**-PL*-8*V-*</li> </ul> |
|                             |                         |

For the cable application type, harnessed connectors which satisfy your specification are supplied. We can also provide connectors and cables other than those listed in this catalog. For details, please consult us.

# KD10/KD20 Series

## RECEPTACLE

Through-hole Solder Type

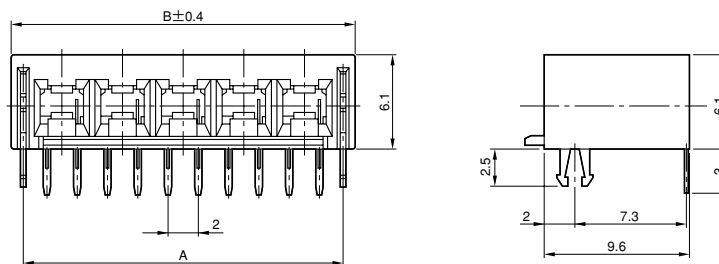
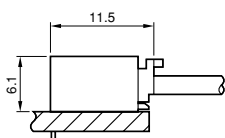
Interchangeable with PLUG (69 Page)

Dimensions in millimeters

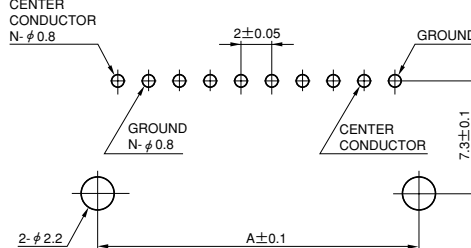
### Right-angle



Dimension of Connector Combinations



PC BOARD LAYOUT • MOUNTING SIDE (REF.)  
(PC BOARD THICKNESS : 1.6mm max.)



### Part Number/Dimensions

| Number of Contact | Part Number   |               | A     | B    |
|-------------------|---------------|---------------|-------|------|
|                   | KD10          | KD20          |       |      |
| 1                 | KD10-RRP-F-0  | KD20-RRP-F-0  | 5.15  | 6.7  |
| 3                 | KD10-RRP3-F-0 | KD20-RRP3-F-0 | 13.15 | 14.7 |
| 5                 | KD10-RRP5-F-0 | KD20-RRP5-F-0 | 21.15 | 22.7 |
| 8                 | KD10-RRP8-F-0 | KD20-RRP8-F-0 | 33.15 | 34.7 |

### Series Classification

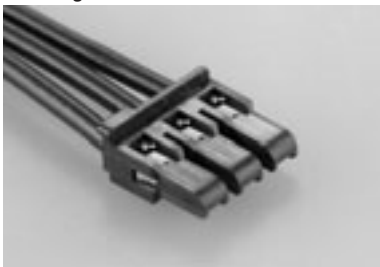
| Series Prefix | Gold Plating Thickness of Contact | Structure of Contact     |
|---------------|-----------------------------------|--------------------------|
| KD10          | 0.1 μm min.                       | One contacting points    |
| KD20          | 0.3 μm min.                       | Double contacting points |

**PLUG**

Intermutable with RECEPTACLE (68 Page)

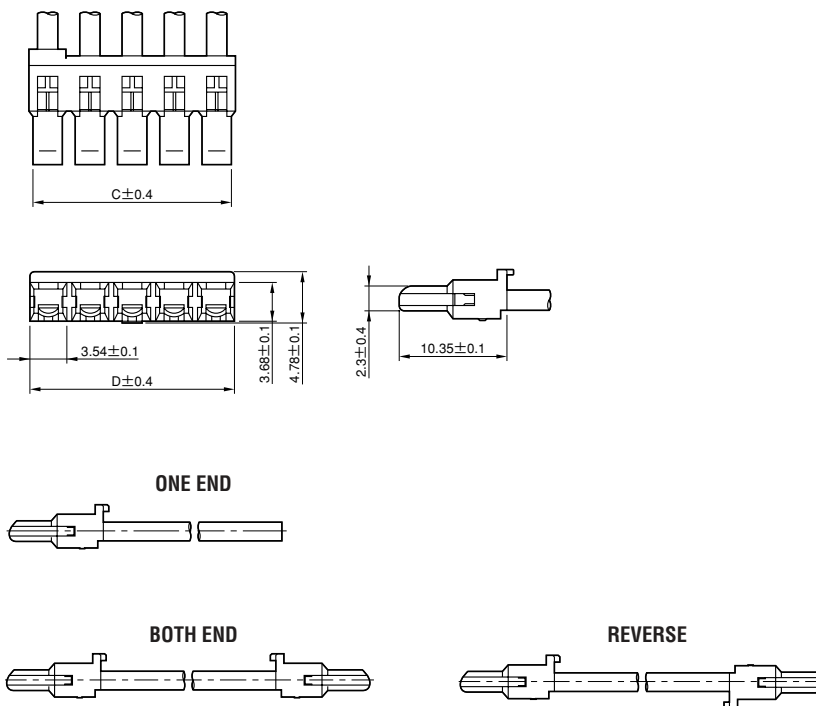
Dimensions in millimeters

**Straight**



(Note) The configuration is slightly different from 50 ohm version to 75 ohm version. For details, please consult us.

For Cable application type, harnessed connectors which satisfy your specification are supplied.



**Part Number/Dimensions**

| Cable Assembly Style | Number of Contact | Part Number           |                       |                       | C    | D     |
|----------------------|-------------------|-----------------------|-----------------------|-----------------------|------|-------|
|                      |                   | 50 Ω                  |                       | 75 Ω                  |      |       |
| One End              | 1                 | KD10-CA***-PL-8DV     | KD20-CA***-PL-8DV     | KD10-CA***-PL-8CV     | 2.8  | 3.54  |
|                      | 3                 | KD10-CA***-PL3-8DV    | KD20-CA***-PL3-8DV    | KD10-CA***-PL3-8CV    | 10.8 | 11.54 |
|                      | 5                 | KD10-CA***-PL5-8DV    | KD20-CA***-PL5-8DV    | KD10-CA***-PL5-8CV    | 18.8 | 19.54 |
|                      | 8                 | KD10-CA***-PL8-8DV    | KD20-CA***-PL8-8DV    | KD10-CA***-PL8-8CV    | 30.8 | 31.54 |
| Both End             | 1                 | KD10-CA***-2PL-8DV    | KD20-CA***-2PL-8DV    | KD10-CA***-2PL-8CV    | 2.8  | 3.54  |
|                      | 3                 | KD10-CA***-2PL3-8DV   | KD20-CA***-2PL3-8DV   | KD10-CA***-2PL3-8CV   | 10.8 | 11.54 |
|                      | 5                 | KD10-CA***-2PL5-8DV   | KD20-CA***-2PL5-8DV   | KD10-CA***-2PL5-8CV   | 18.8 | 19.54 |
|                      | 8                 | KD10-CA***-2PL8-8DV   | KD20-CA***-2PL8-8DV   | KD10-CA***-2PL8-8CV   | 30.8 | 31.54 |
| Reverse              | 1                 | KD10-CA***-2PL-8DV-R  | KD20-CA***-2PL-8DV-R  | KD10-CA***-2PL-8CV-R  | 2.8  | 3.54  |
|                      | 3                 | KD10-CA***-2PL3-8DV-R | KD20-CA***-2PL3-8DV-R | KD10-CA***-2PL3-8CV-R | 10.8 | 11.54 |
|                      | 5                 | KD10-CA***-2PL5-8DV-R | KD20-CA***-2PL5-8DV-R | KD10-CA***-2PL5-8CV-R | 18.8 | 19.54 |
|                      | 8                 | KD10-CA***-2PL8-8DV-R | KD20-CA***-2PL8-8DV-R | KD10-CA***-2PL8-8CV-R | 30.8 | 31.54 |

(Note) \*\*\*: Add Cable length included connector length (10.35mm) .  
60mm to 800mm...At intervals of 20mm Over 840mm...At intervals of 40mm

**Series Classification**

| Series Prefix | Gold Plating Thickness of Contact | Applicable Cables             |                  |
|---------------|-----------------------------------|-------------------------------|------------------|
|               |                                   | 50 Ω                          | 75 Ω             |
| KD10          | 0.1 μm min.                       | 0.8D-IEV(LF)                  | 0.8CV-E41447(LF) |
| KD20          | 0.3 μm min.                       | CO-6F-SB-CX50(Heat-resistant) | —                |

---

## Before placing an order

- ①The values specified in this catalogue are only for reference. The products and 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.
- ②Users 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.
- ③The products presented in this catalogue 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**

1-19, Aobadai 3-chome, Meguro-ku, Tokyo 153-8539, Japan  
Telephone: (81) 3-3780-2768 Facsimile: (81) 3-3780-2883

<http://www.jae.com>

<http://www.jae-connector.com>

---

### **JAE Electronics, Inc.**

142 Technology Drive, Suite 100 Irvine, California 92618-2430, U.S.A.  
Telephone: (1) 949-753-2600 Facsimile: (1) 949-753-2699  
(800) JAE-PART (523-7278) Toll free in U.S.A. except in California and Alaska

---

### **JAE Europe, Ltd.**

Coliseum Business Center, Riverside Way, Camberley, Surrey GU15 3YL, U.K.  
Telephone: (44) 1276-404000 Facsimile: (44) 1276-404010

---

### **JAE Taiwan, Ltd. <Taipei Branch Office>**

4F-1, No.88, Sec.2, Chung Hsiao E.Rd., Taipei, Taiwan, R.O.C.  
Telephone: (886) 2-2396-7676 Facsimile: (886) 2-2392-5929

---

### **JAE Hong Kong, Ltd.**

Suites 1407-11,14/F., Tower2, The Gateway, 25 Canton Road,  
Tsimshatsui, Kowloon, Hong Kong  
Telephone: (852) 2723-7782 Facsimile: (852) 2723-9028

---

### **JAE Shanghai Co., Ltd.**

RM1407, Shanghai Mart 2299 Yanan Road (West) Shanghai, 200336 P.R.C.  
Telephone: (86) 21-6236-0322 Facsimile: (86) 21-6236-1292

---

### **JAE Singapore Pte Ltd.**

33 Tannery Lane, #02-01 Hoesteel Industrial Building, Singapore 347789  
Telephone: (65) 6748-1332 Facsimile: (65) 6748-2920

---

### **JAE Korea, Inc.**

1602, City Air Tower, 159-9, Samsung-dong, Gangnam-gu, Seoul, 135-973 Korea  
Telephone: (82) 2-551-8959 Facsimile: (82) 2-551-8958

---

