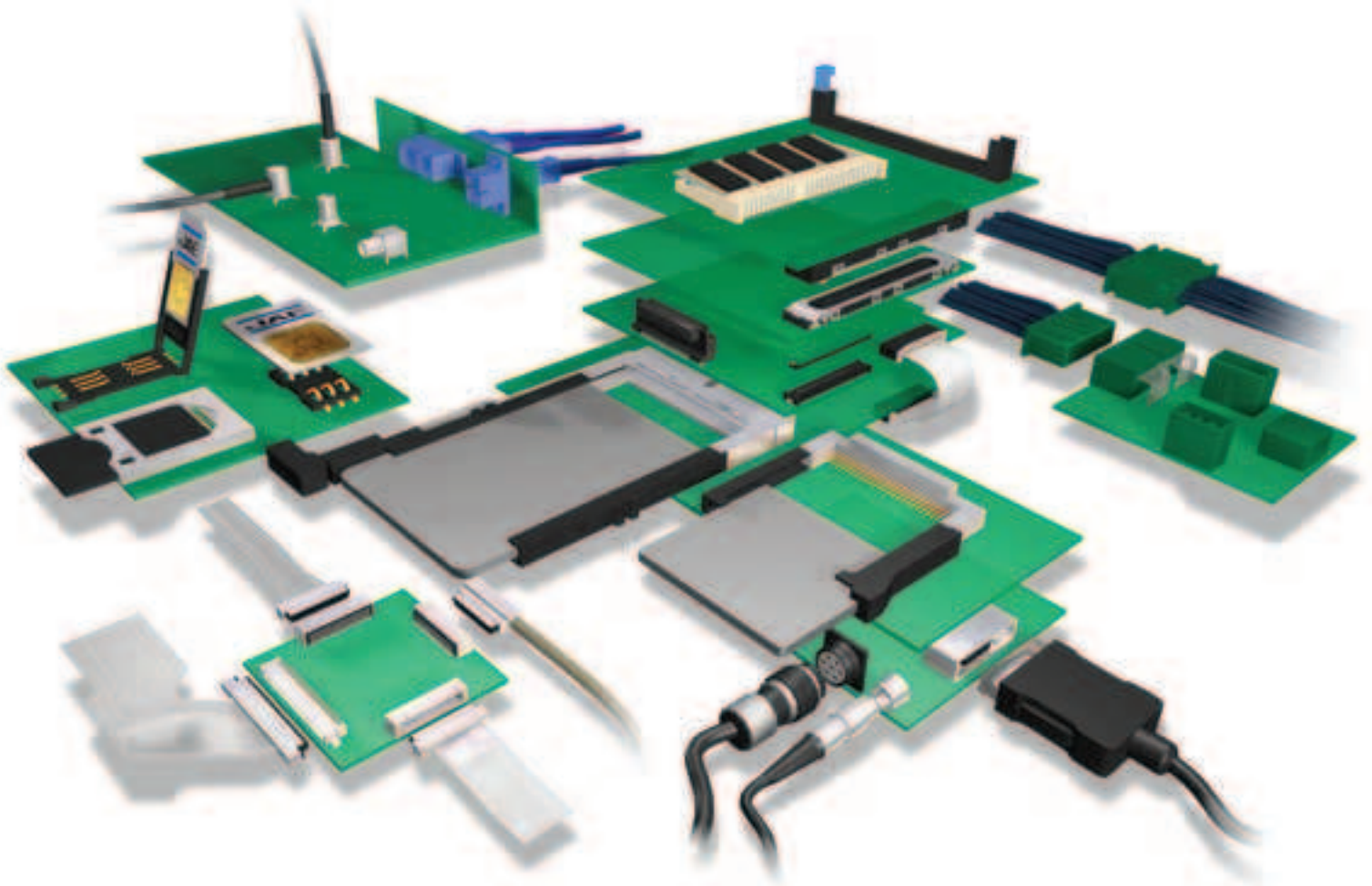


Technology to Inspire Innovation

**Preferred  
Connector Products**

**JAE**



**JAE Electronics, Inc.**

For Additional Information Visit [www.jae-connector.com](http://www.jae-connector.com)

**J**apan Aviation Electronics Industry, Ltd. (JAE) is an international manufacturer and supplier of electronic components and systems. For over four decades, JAE has provided the electronics industry with solutions to complex design requirements. Since its founding, the Company has strived to contribute to society through market-driven, technology-based global business operations under the philosophy: “Technology to Inspire Innovation.”

With worldwide and world-class manufacturing certified to ISO 9001 and QS 9000, JAE has made the commitment to meet the global requirements of our customer. In addition to a network of state of the art manufacturing facilities, JAE has technical service offices located around the world, staffed with experts in connector design and application.

This catalog contains a select overview of JAE Connector Products. For in-depth information on our complete product line, and information on new developments, visit JAE’s online catalog at [www.jae-connector.com](http://www.jae-connector.com).

Innovative design, quality oriented manufacturing, commitment to our customers and sensitivity to the environment assures JAE’s leadership position in the 21<sup>st</sup> century.

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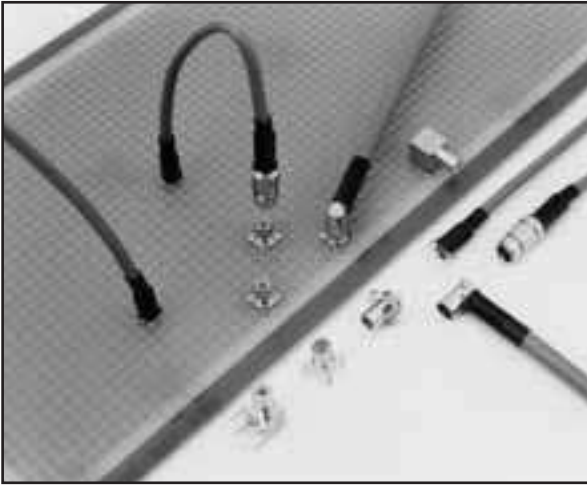
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- All JAE connector products shown in this catalog are lead free.
- We reserve the right to modify designs in order to improve quality, keep pace with technological advancements or meet particular requirements in production.
- Products shown in this catalog are made for the applications specified. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information. Recommended Applications: Computers, Office Machines, Measuring Devices, Telecommunications Devices (Terminals, Mobile Devices) AV Devices, Household Applications, FA Devices, etc.
- Refer to end of catalog for alphabetical index of products.

# CN10 SERIES CONNECTORS

## Miniature Coaxial Connectors



### FEATURES

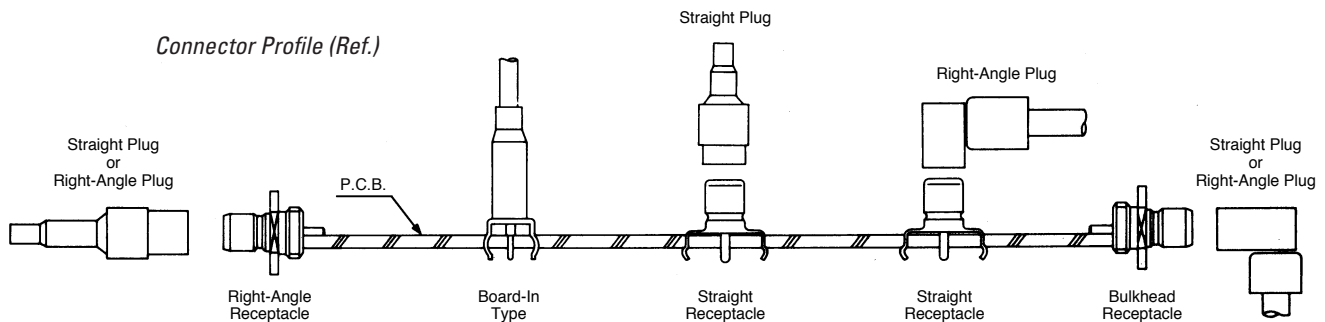
- Miniature connectors for board-to-coaxial jumper cable applications. Designed per MIL SMB type and JIS-C-5415
- Applicable frequency range is zero through 3 GHz. High impedance matching: the voltage standing wave ratio is less than 1.1 (Right-angle receptacle is 1.2 max. voltage standing wave ratio.)
- Low profile: the height on the board is 8mm (.315") to 9mm (.354") when a right-angle plug is mated with a straight receptacle
- An extrusion on the shell innerwall of the plug ensures mechanical and electrical integrity
- Plugs are supplied as cable assemblies
- The straight receptacle and board-in plug have kinked leads to hold connector during soldering



Miniature connectors for board-to-jumper coaxial cable applications intended for transmission of high frequency waves and high density packaging in electronic devices. With the combination of three types of receptacle (straight, right-angle and bulkhead) and three types of plug (straight, right-angle and board-in), it is feasible to have various connection styles. Suitable for use in automotive telephone sets, portable telephone sets, various communication devices and electronic measuring instruments.

### GENERAL SPECIFICATIONS

|                                 |  |
|---------------------------------|--|
| Characteristic Impedance        | 50 ohms  |
| Current Rating                  | DC 2 Amps per contact  |
| Voltage Rating                  | 100 VAC r.m.s. (for one minute)  |
| Dielectric Withstanding Voltage | 200 VAC r.m.s. (for one minute)  |
| Insulation Resistance           | 500 megohms min. (DC 250 V)  |
| Contact Resistance              | Center Contacts: 8 milliohms (max.)<br>Outer Contacts: 8 milliohms (max.)          |
| Voltage Standing Wave Ratio     | 1.2 max. (DC -3 GHz)   |
| Total Mating Force              | 49N (max.)   |
| Total Unmating Force            | 8.8 N (max.)   |
| Operating Temperature Range     | -55°C to +165°C (Connector only)<br>Only right-angle receptacle is<br>-40°C ~ 85°C |
| Applicable Cables               | 1.5 D-QEV (1.5 D-2V)<br>1.5 D-QEW (1.5 D-2W)<br>0.8 D-QEW (0.8 D-2W)               |



Dimensions and specifications subject to change without notice.

# CN10 SERIES CONNECTORS

## Miniature Coaxial Connectors

### STANDARD CABLE ASSEMBLIES (PLUG INCLUDED)

- For plug side, cable harnessed plug will be supplied
- The length (L in the figure below) is 100mm (3.937")
- For other lengths, consult JAE

### Part No. Explanation

|                            |      |   |    |     |   |     |    |   |   |   |
|----------------------------|------|---|----|-----|---|-----|----|---|---|---|
|                            | CN10 | - | CA | 100 | - | RPL | -  | * | - | E |
|                            | CN10 | - | CA | 100 | - | BI  | PL | - | * | E |
| Series                     |      |   |    |     |   |     |    |   |   |   |
| Cable Harness Mark         |      |   |    |     |   |     |    |   |   |   |
| Cable Length               |      |   |    |     |   |     |    |   |   |   |
| L - 100mm                  |      |   |    |     |   |     |    |   |   |   |
| Connector Configuration    |      |   |    |     |   |     |    |   |   |   |
| PL - Straight Plug         |      |   |    |     |   |     |    |   |   |   |
| RPL - Right-Angle Plug     |      |   |    |     |   |     |    |   |   |   |
| Connector Configuration    |      |   |    |     |   |     |    |   |   |   |
| PL - Straight Plug         |      |   |    |     |   |     |    |   |   |   |
| RPL - Right-Angle Plug     |      |   |    |     |   |     |    |   |   |   |
| Applicable Cable           |      |   |    |     |   |     |    |   |   |   |
| 15 DV - 1.5D-QEV (1.5D-2V) |      |   |    |     |   |     |    |   |   |   |
| 15DW - 1.5D-QEW (1.5D-2W)  |      |   |    |     |   |     |    |   |   |   |
| 8 DW - 0.8D-QEW (0.8D-2W)  |      |   |    |     |   |     |    |   |   |   |
| Lead Free Version          |      |   |    |     |   |     |    |   |   |   |

|                        |   | Applicable Cable    | Part Number             |
|------------------------|---|---------------------|-------------------------|
| Single-end termination | <b>• Right-angle plug</b><br>                   | 1.5D -QEV (1.5D-2V) | CN10-CA100-RPL-15DVE    |
|                        |   | 1.5D -QEW (1.5D-2W) | CN10-CA100-RPL-15DWE    |
|                        | <b>• Straight plug</b><br>                      | 1.5D -QEV (1.5D-2V) | CN10-CA100-PL-15DV      |
|                        |   | 0.8D -QEW (0.8D-2W) | CN10-CA100-PL-15DW      |
| Double-end termination | <b>• Right-angle plug</b><br>                   | 1.5D -QEW (1.5D-2W) | CN10-CA100-PL-8DW       |
|                        |   | 0.8D -QEW (0.8D-2W) | CN10-CA100-RPL-RPL-15DW |
|                        | <b>• Right-angle plug and Board-in type</b><br> | 1.5D -QEW (1.5D-2W) | CN10-CA100-BI-RPL-15DV  |
|                        |   | 0.8D -QEW (0.8D-2W) | CN10-CA100-BI-RPL-15DW  |
|                        | <b>• Straight plug and Board-in type</b><br>    | 1.5D -QEW (1.5D-2W) | CN10-CA100-BI-PL-15DV   |
|                        |   | 1.5D -QEW (1.5D-2W) | CN10-CA100-BI-PL-15DW   |
|                        | <b>• Straight plug and Right-angle plug</b><br> | 0.8D -QEW (0.8D-2W) | CN10-CA100-BI-PL-8DW    |
|                        |   | 1.5D -QEW (1.5D-2W) | CN10-CA100-RPL-15DW     |

Dimensions in mm (inches).

Technology to Inspire Innovation

# JAE

***“Building Technologies  
to Connect Your World”***



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