

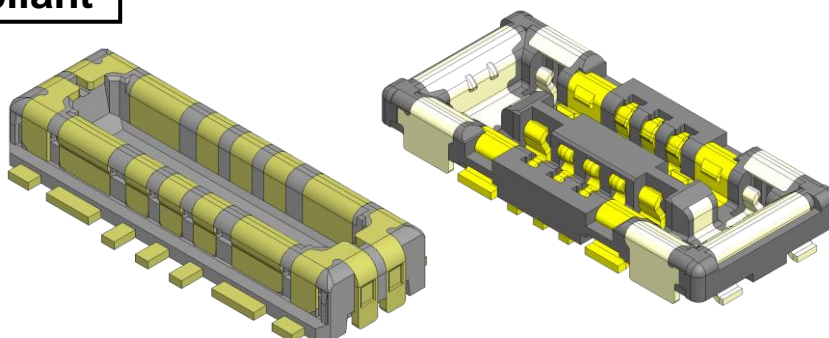
**Compact 15A Battery Board-to-board (FPC) Connector**

CONNECTOR

**WP12 Series**

MB-0402-1

Mar.2025

**RoHS Compliant**PlugReceptacle

Portable devices, including smartphones, wearable devices and tablets, are increasingly demanding higher power connectors to enable faster charging speeds and higher capacity batteries. In addition, as devices become smaller, connectors need to be miniaturized while still maintaining mechanical strength. The WP12 Series supports 15A of current, which is 1.25 times higher than its predecessor, the WP10 Series, while having the same pitch and stacking height. Moreover, compared with the WP11 Series, the WP12 series achieves further miniaturization, excellent mating operability and higher extraction force.

Application

Smartphones, smart glasses, AR/VR headsets, tablet PCs, gaming terminals, other portable devices

**Features**

- 0.4mm pitch, 0.7mm stacking height
- Power terminal and hold-down support 15A supply
- Enhanced mating guide length  
(0.45mm in pitch direction, 0.46mm in width direction)
- High extraction force achieved with additional detent feature in hold-down  
(over 10N)
- Improved workability for customers with a clear click feeling
- Highly reliable 2-point of contact
- Nickel barrier on contact prevents solder wicking

General Specifications

|                                 |  |
|---------------------------------|--|
| Number of Contacts              | 6 pos.(signal), 4 pos.(power), 2pos.(hold-down)  |
| Pitch                           | 0.4mm  |
| Contact Resistance              | Signal Terminal:<br>20mΩ max. (initial) 30mΩ max. (after test)<br>Power Terminal + Hold-down:<br>5mΩ max. (initial) 20mΩ max. (after test) |
| Dielectric Withstanding Voltage | AC250Vr.m.s. (per minute)  |
| Insulation Resistance           | 100MΩ min. (initial)   |
| Durability                      | 10 mating cycles   |
| Operating Temperature Range     | -40 deg. C to +85 deg. C   |
| Rated Current                   | Signal Terminal: 0.3A<br>Power Terminal + Hold-down: 15A   |
| Rated Voltage                   | AC, DC 50V   |
| Insertion Force                 | 40N max.   |
| Extraction Force                | 10N min. (initial)   |

Materials and Finishes

| Components | Materials              | Finishes  |
|------------|------------------------|---|
| Contact    | Copper alloy           | Au/Ni plating (Contact area)<br>Au/Ni plating (Mounting area) |
| Insulator  | Heat-resistant plastic | -   |
| Hold-down  | Copper alloy           | Au/Ni plating (Contact area)<br>Au/Ni plating (Mounting area) |

Ordering Information

WP12 - \* \* \* \* V A \* - R \* \* \* \*

Series: WP12

Contact Shape  
P : Plug  
S : Socket

Number of Contacts :  
in three digits (\*\*\*)

Finish  
A: Au plating

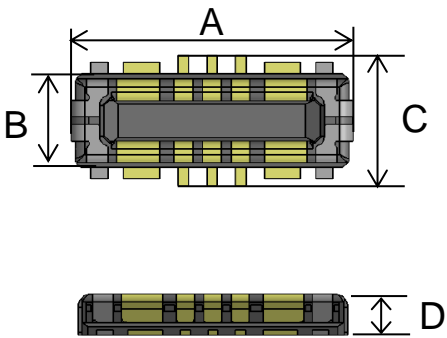
Connection Type  
V: Stacking

Modification Code

Reeled Part Number (Note 1)  
(R15000)

Note 1) An embossed tape reel contains 15,000 pieces.  
Please contact us for details on embossed tape specifications.

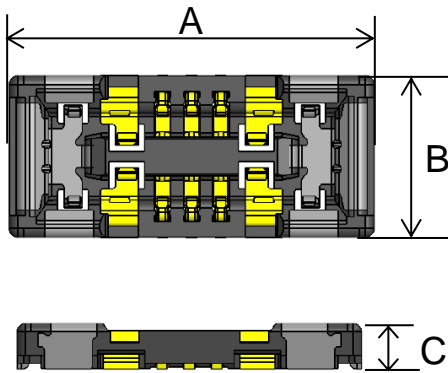
Outer Dimensions (Plug)



Unit : mm

| Dimensions<br>Number<br>of Contacts | Unit : mm |      |     |      |
|-------------------------------------|-----------|------|-----|------|
|                                     | A         | B    | C   | D    |
| 6                                   | 3.91      | 1.15 | 1.8 | 0.59 |

Outer Dimensions (Receptacle)



Unit : mm

| Dimensions<br>Number<br>of Contacts | A | B    | C    |
|-------------------------------------|---|------|------|
| 6                                   | 5 | 2.23 | 0.65 |

Product Drawings and Specifications

| Part Number                              | Drawing Number                | Specifications | Handling Instructions |
|--|-------------------------------|----------------|-----------------------|
| WP12-P***VA*-R15000<br>(Plug side)       | SJ131126 (Individual Product) | JACS-11564     | J AHL-11564           |
|  | SJ131127 (Reeled Product)     |                |                       |
| WP12-S***VA*-R15000<br>(Receptacle side) | SJ131128 (Individual Product) |                |                       |
|  | SJ131129 (Reeled Product)     |                |                       |

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.