



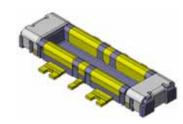
Stacking Type Board-to-Board (FPC) Connector

CONNECTOR
MB-0303-3
September 2016

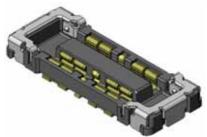
## **WP10 Series**

### **RoHS Compliant**

Plug



### Receptacle



The WP10 Series is a stacking type board-to-board (FPC) connector which is low-profile and saves space. It is ideal for high-current connection areas like battery connections in compact hand-held devices such as smartphones, wearable devices, and tablet PCs.

This product features a high-current compatible power terminal and allows for power distribution of 10A. The hold-down structure which has a lock area prevents damage to the connector during mating, improves operability for customers and also has a high extraction force to prevent disengagement of the product.

#### **Features**

- 2 rows, 0.7mm stacking height
- Power terminals compatible with 10A power supply (5.0A / pin x 4 pin).
- 2-point structure design for both power and signal terminals to resist twisting stress. Product with thicker plating is also available.
- Armored, durable hold-down structure with lock area that enhances retention force and adds protection to the mating surface to prevent damage to the plastic insulator.
- Improved workability for customers with a clear click feeling during mating.
- Contact structure ensures high wear-resistance and high conduct reliability.
- Pb-free. Nickel barrier on contact.

### **General Specifications**

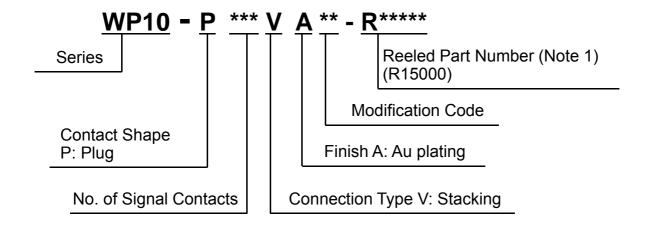
- Number of Contacts
  Signal terminals: 2, 4
  Power terminals: 4
- Pitch: 0.4mm, 2 row
- Operating temperature: -40 Deg. C to +85 Deg. C
- Contact Resistance: Signal terminal 20mΩ max. (initial) Power terminal 5mΩ max. (initial)
- Durability: 30 cycles

- Rated Current
  - Signal terminal: AC, DC 0.4A / pin Power terminal: AC, DC 5.0A / pin
- Rated Voltage: AC, DC 50V
- Insulation Resistance:  $100M\Omega$  min. (initial)
- Dielectric Withstanding Voltage: AC250Vr.m.s for 1 minute
- Total Insertion Force: 40N max.
- Total Extraction Force: 10N min.

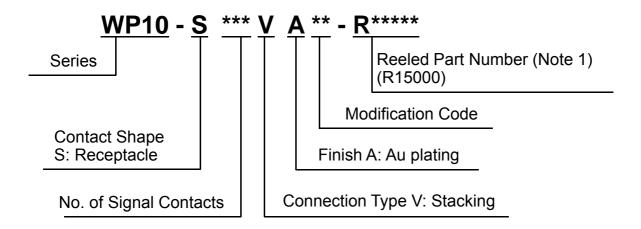
#### Materials and Finishes

Component	Material and Finish
Signal Contact (Plug / Receptacle)	Copper alloy / Au plating
Power Contact (Plug / Receptacle)	Copper alloy / Au plating
Insulator	Heat-resistant Plastic
Hold-down (Plug / Receptacle)	Copper alloy / Au plating

### Ordering Information (Plug)



### Ordering Information (Receptacle)

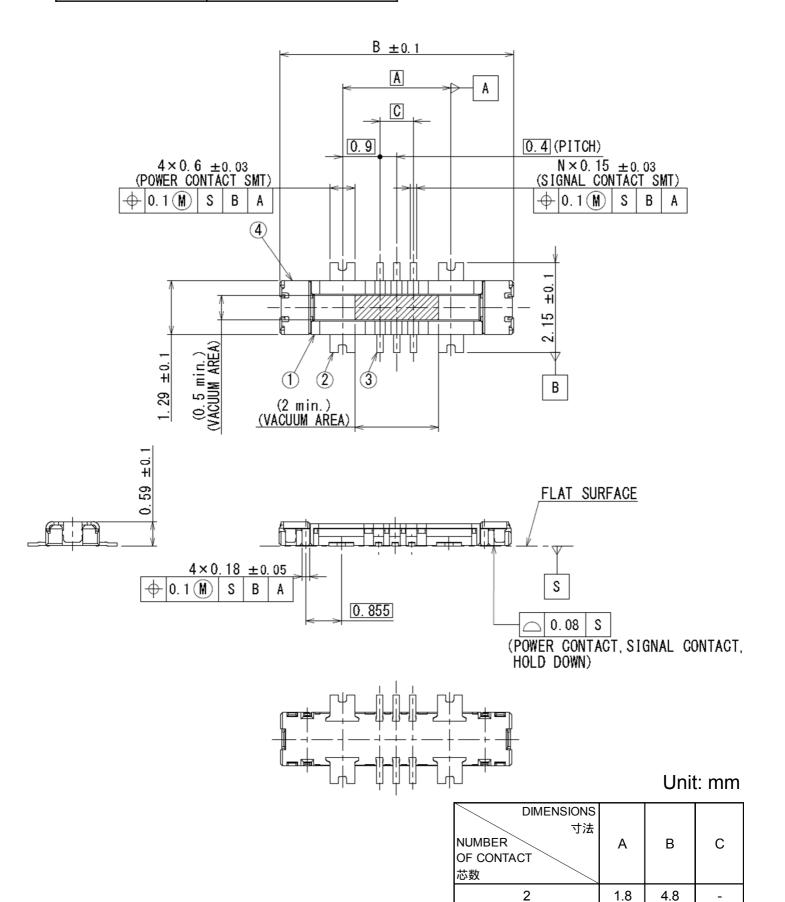


Note 1) An embossed tape reel contains 15,000 pieces.

Please contact us for details on embossed tape specifications.

Part Number	WP10-P***VA10
SJ Drawing	SJ116135

## WP10 Plug



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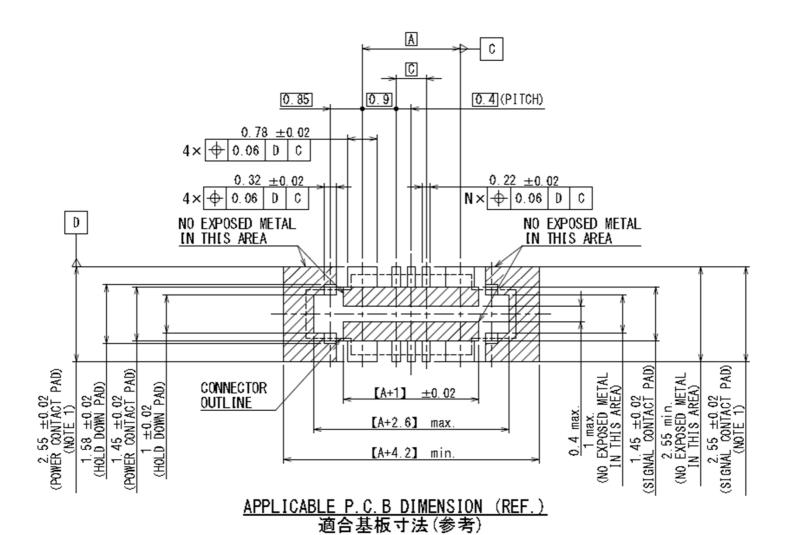
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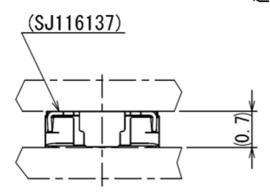
5.2

0.4

Part Number	WP10-P***VA10
SJ Drawing	SJ116135

## WP10 Plug

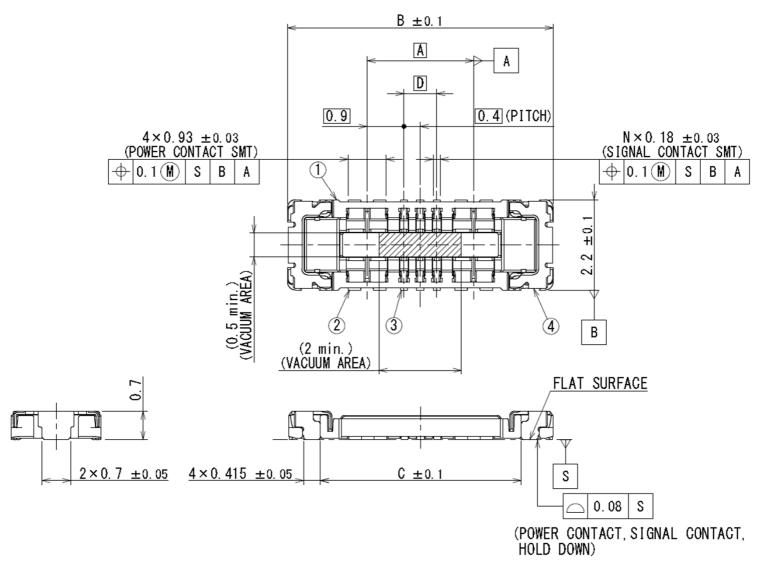


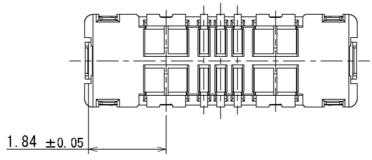


MATED CONDITION (REF.) 嵌合状態図(参考)

Part Number	WP10-S***VA10
SJ Drawing	SJ116137

# WP10 Receptacle



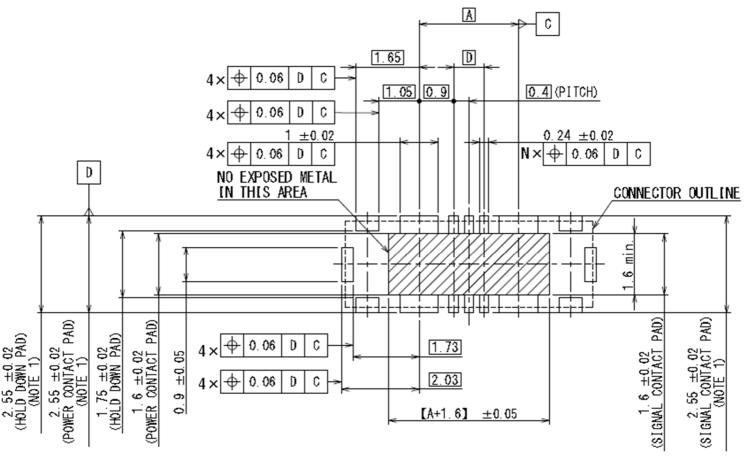


Unit: mm

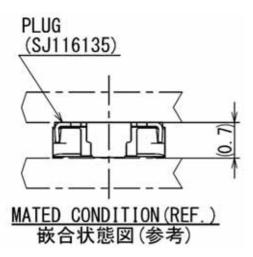
DIMENSIONS				
寸法 NUMBER OF CONTACT 芯数	Α	В	С	D
2	1.8	5.68	4.12	ı
4	2.2	6.08	4.52	0.4

Part Number	WP10-S***VA10
SJ Drawing	SJ116137

## WP10 Receptacle



APPLICABLE P.C.B DIMENSION (REF.) 適合基板寸法(参考)



Note 1) Dimension  $3 \pm 0.05$  is recommended in case repair is needed.

#### **Technical Documents**

Series	WP10
Product Drawing (Plug)	Individual Connector: SJ116135 Reeled Product: SJ116136
Product Drawing (Receptacle)	Individual Connector: SJ116137 Reeled Product: SJ116138
Specifications	JACS-11080
Handling Instructions	JAHL-11080
Summary Report	SR-C-1552

#### **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.
- 3. 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, 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

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