

NEW



0.35mm Pitch, Stacking Type Board-to-Board (FPC) Connector CONNECTOR

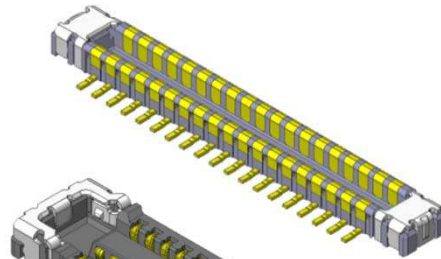
MB-0308-3

WP27D Series

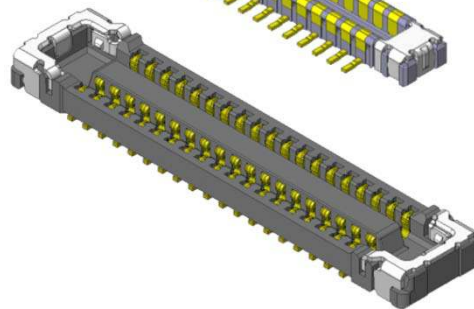
September 2017

RoHS Compliant

Plug



Receptacle



Outline

The WP27D Series is a 0.35mm pitch low-profile stacking type board-to-board (FPC) connector with special hold downs that can be used as power supply terminals, and is ideal for high-density mounting in slim and compact information communication devices like smartphones. This product has a structure that adds protection to the mating surface to prevent damage to the insulator in case force is applied while connectors are misaligned. Also the hold-downs can be used as high-current terminals.

The WP27D Series saves board space and enhances design flexibility by reducing the number of terminals typically required in standard connectors.

Features

- 0.35mm pitch, 2 rows, 0.7mm stacking height.
- Two terminals for power supply compatible with 3.0A each.
- Hold-down structure adds protection to the mating surface to prevent damage to the insulator. (Armored)
- 2-point contact design to resist twisting stress.
- Improved workability for customers with a clear click feeling.
- Contact structure ensures high wear-resistance and high contact reliability.
- Pb-free. (Ni barrier on contact prevents solder wicking)
- Signal contact supports 10 Gbps transmission rate.
- Supports MIPI, USB3.1 Gen2, and PCIe Gen3 transmission.

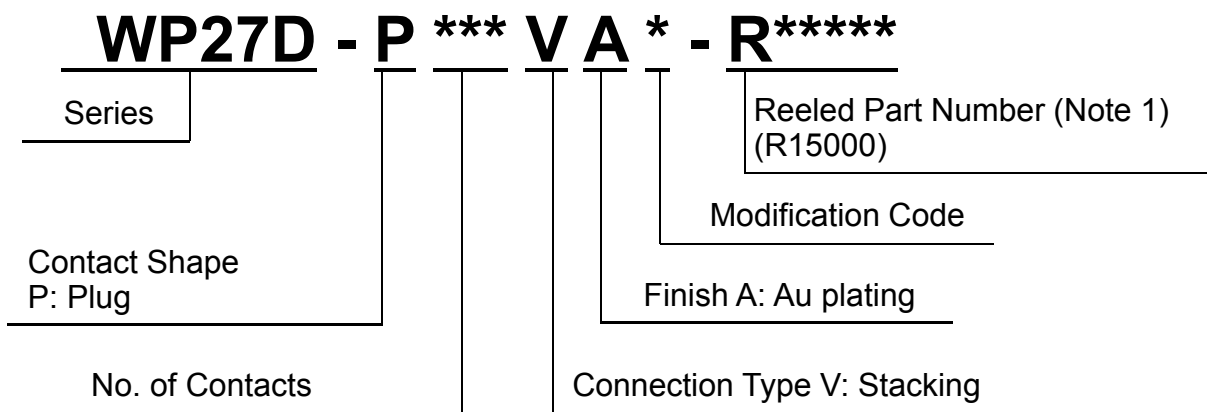
General Specifications

- | | |
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| <ul style="list-style-type: none"> ■ No. of Contacts:
10, 30, 34, 38, 40, 50 pos. ■ Pitch: 0.35mm, 2 rows ■ Operating Temperature:
-40 Deg. C to +85 Deg. C ■ Contact Resistance:
(Signal terminal)
70m Ω max. (initial) (Hold-down for power supply)
20m Ω max. (initial) ■ Life Time: 30 mating cycles | <ul style="list-style-type: none"> ■ Rated Current:
(Signal terminal)
AC, DC 0.3A per terminal (Hold-down for power supply)
AC, DC 3.0A per terminal ■ Rated Voltage: AC, DC 50V ■ Insulation Resistance: 100M Ω min. (initial) ■ Dielectric Withstanding Voltage:
AC250Vr.m.s for 1 minute ■ Total Insertion Force:
1.5N x (n+4) max. (n: No. of pos.) ■ Total Extraction Force:
0.15N x (n) min. (n: No. of pos.) |
|--|--|

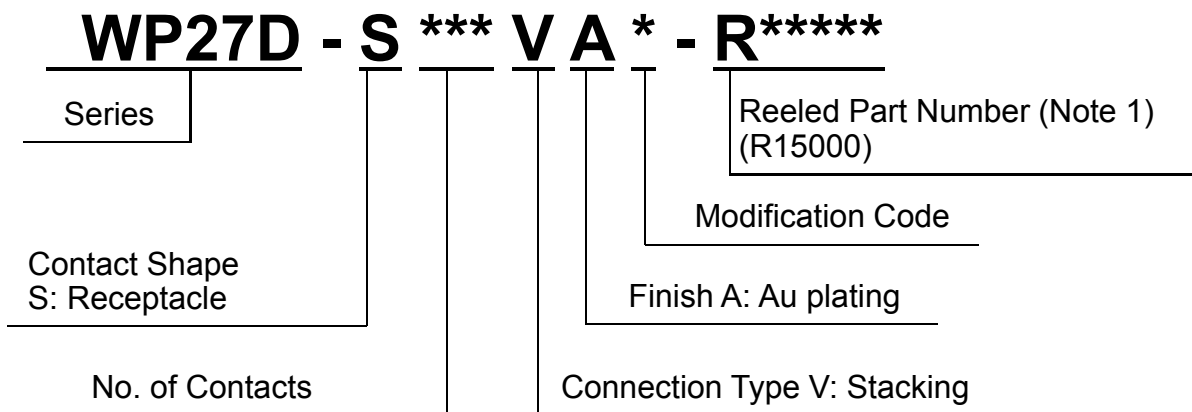
Components and Materials

Component	Material / Finish
Contact	(Contact area) Copper alloy / Au plating (Mounting area) Copper alloy / Au plating
Insulator	Heat-resistant Plastic
Hold-down	Plug Side: Copper alloy / Au plating
	Receptacle Side: Copper alloy / Au plating

Ordering Information (Plug)



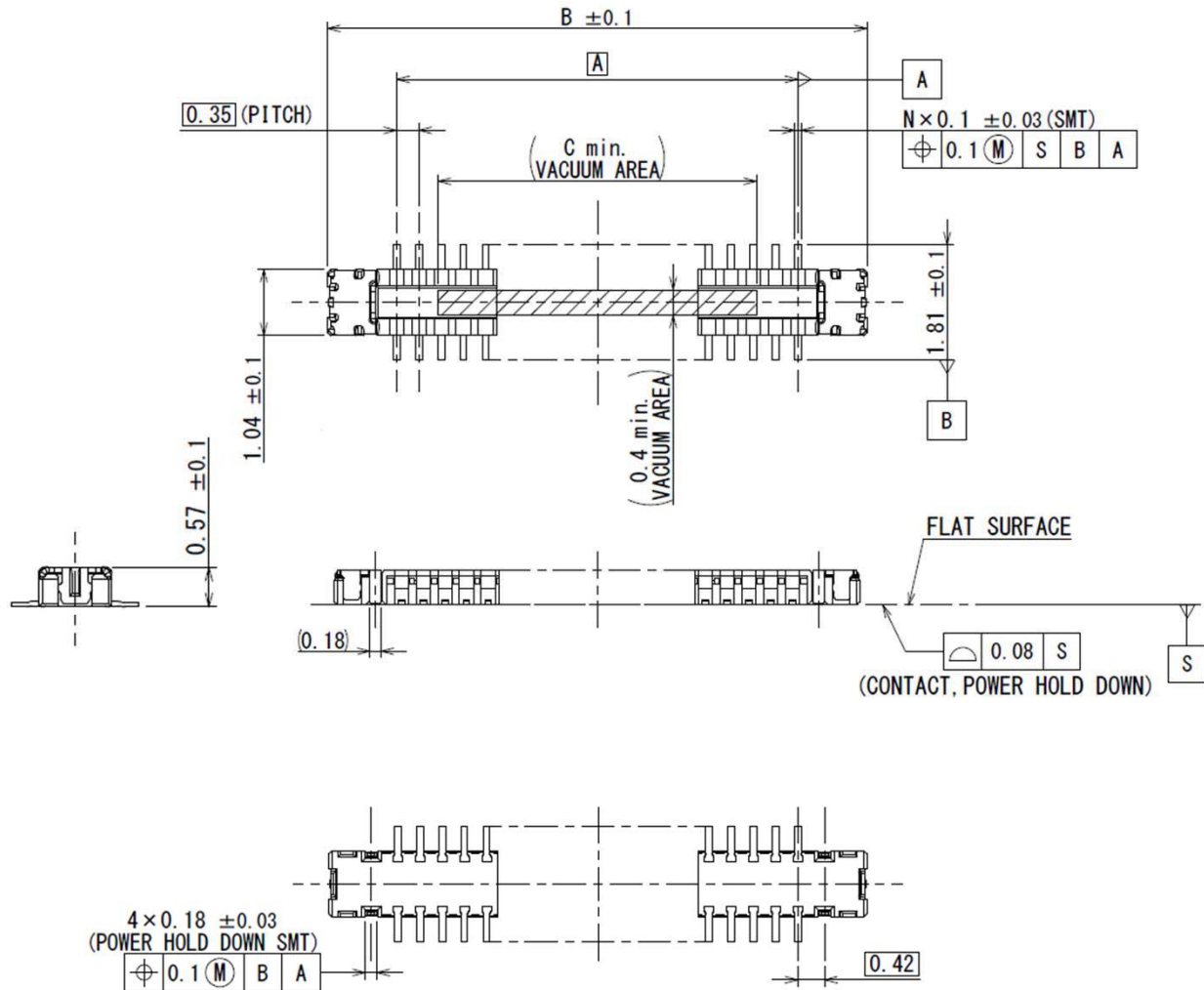
Ordering Information (Receptacle)



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

Part Number	WP27D-P***VA3
Drawing No.	SJ117892

WP27D Plug



Unit: mm

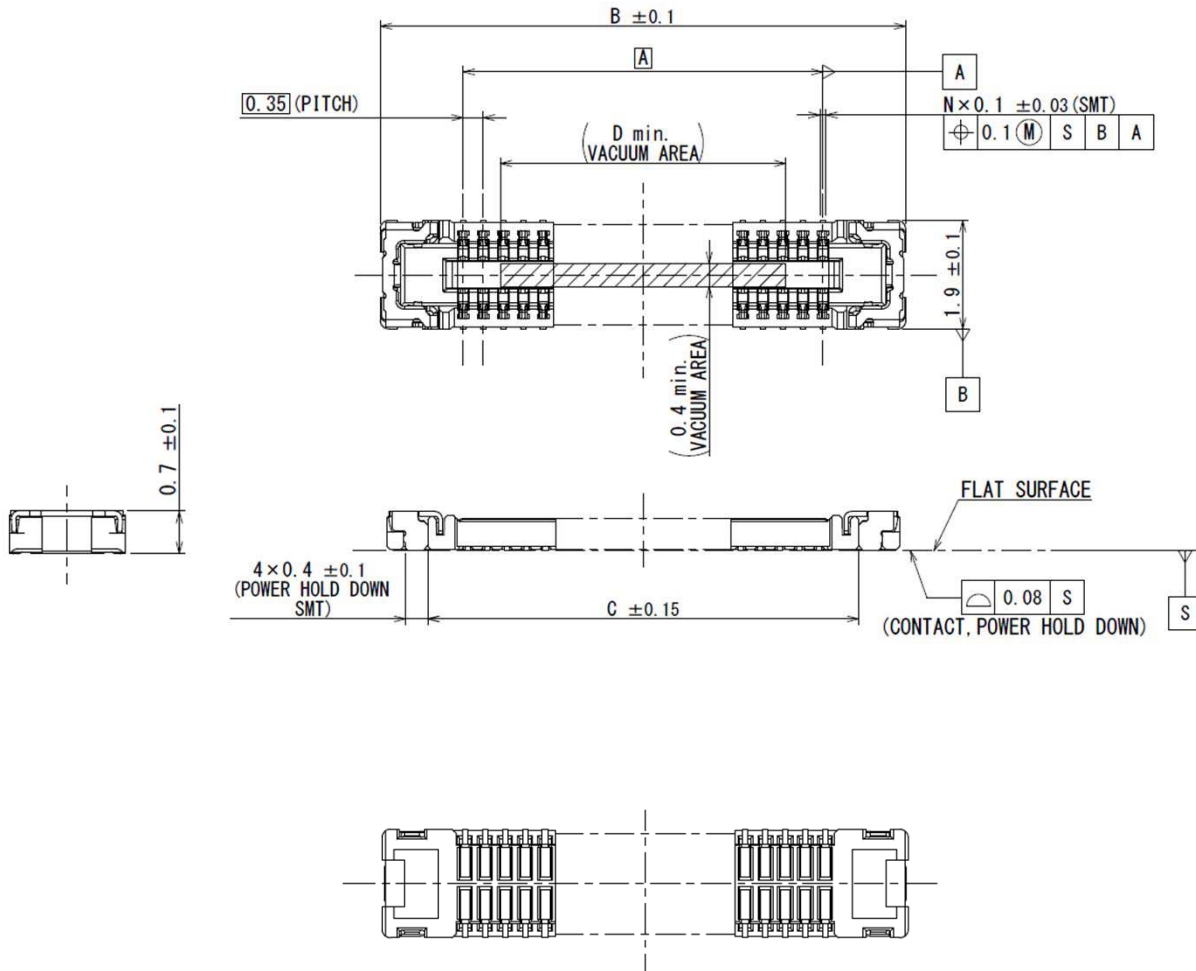
NUMBER OF CONTACT 芯数	DIMENSIONS 寸法		
	A	B	C
10	1.40	3.57	1.0
30	4.90	7.07	2.0
34	5.60	7.77	5.0
38	6.30	8.47	5.0
40	6.65	8.82	5.0
50	8.40	10.57	5.0

2.2 ± 0.02 (POWER HOLD DOWN PAD AREA) 1.26 ± 0.02 (POWER HOLD DOWN SMT AREA) 0.7 ± 0.02 (POWER HOLD DOWN SMT AREA)	1.45 0.58 0.28	A 0.35 (PITCH) ELECTRICAL INSULATING COATING (SHADED AREA) $[A+0.4] \text{ min.}$ (INSULATING AREA) $[A+3.2] \text{ min.}$ (INSULATING AREA) APPLICABLE P.C.B. DIMENSION (REF.) 適合基板寸法(参考)	C $N \times 0.17 \pm 0.02$ 0.06 D C 0.52 max. (INSULATING AREA) 1.12 ± 0.02 (CONTACT PAD AREA) 2.2 ± 0.02 (CONTACT PAD AREA) (NOTE)
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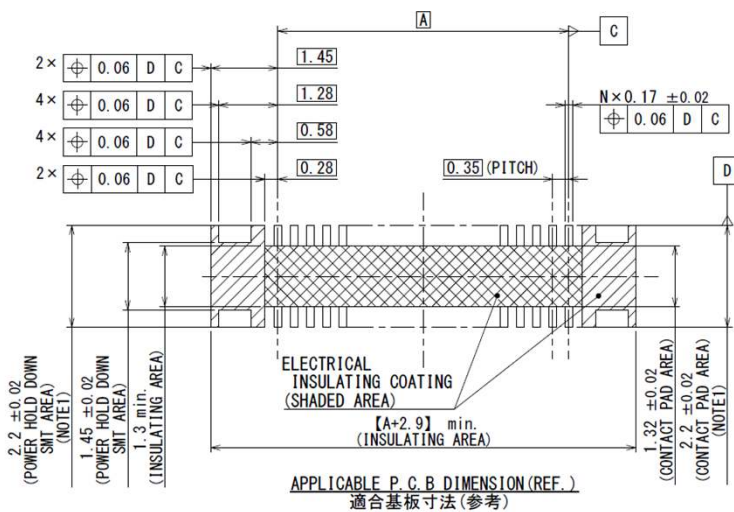
Note 1) Dimension 2.8 ± 0.05 is recommended in case repair is needed.

Part Number	WP27D-S***VA3
Drawing No.	SJ117894

WP27D Receptacle



Unit: mm



DIMENSIONS 寸法	A	B	C	D
NUMBER OF CONTACT 芯数				
10	1.40	4.30	2.83	1.0
30	4.90	7.80	6.33	2.0
34	5.60	8.50	7.03	5.0
38	6.30	9.20	7.73	5.0
40	6.65	9.55	8.08	5.0
50	8.40	11.30	9.83	5.0

Note 1) Dimension 2.8 ± 0.05 is recommended in case repair is needed.

Product Drawings and Specifications

Series	WP27D
Drawing No. (Plug)	Individual Product: SJ117892 Reeled Product: SJ117893
Drawing No. (Receptacle)	Individual Product: SJ117894 Reeled Product: SJ117895
Specifications	JACS-11172
Handling Instructions	JAHL-11172
Summary Report	SR-C-1594

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.

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