

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

CONNECTOR

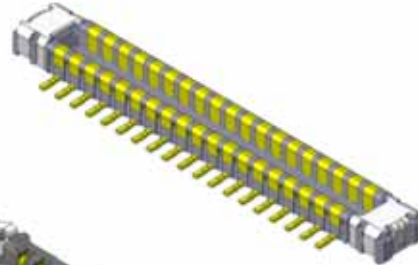
WP27D Series

MB-0308-4

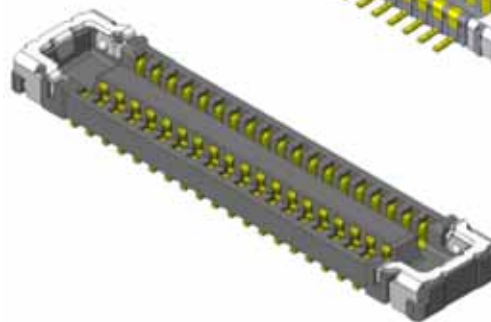
December 2019

RoHS Compliant

Plug



Receptacle



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.

Applicable Devices

Smartphone, tablet PCs, notebook PCs, audio-visual devices, and others

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.

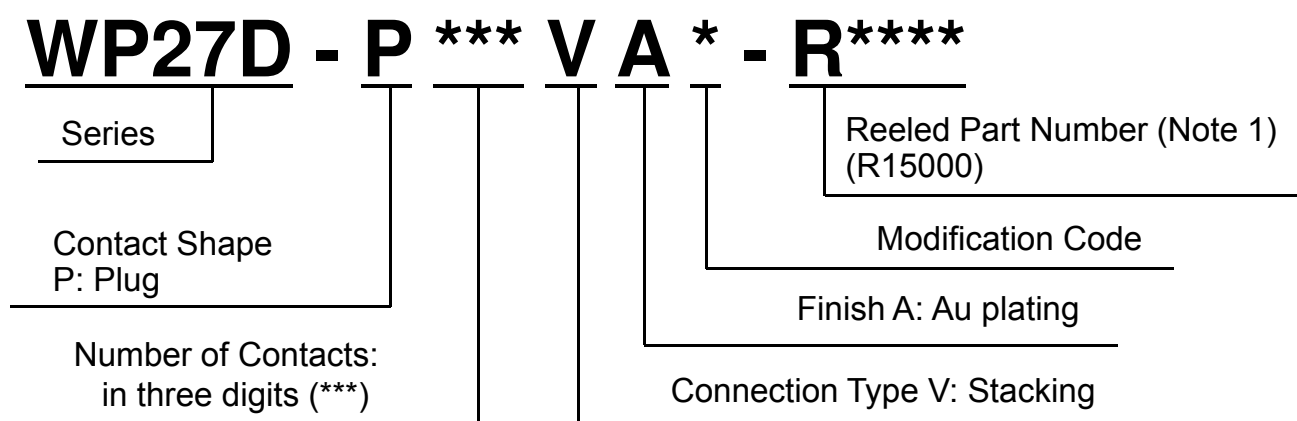
General Specifications

Number of Contacts	10, 24, 30, 34, 38, 40, 50, 60
Pitch	0.35mm, 2 rows
Contact Resistance	(Signal terminal) 70mΩ max. (initial) (Hold-down for power supply) 20mΩ max. (initial)
Dielectric Withstanding Voltage	AC250Vr.m.s for 1 minute
Insulation Resistance	100MΩ min. (initial)
Life Time	30 mating cycles
Operating Temperature Range	-40°C to +85°C
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
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.)

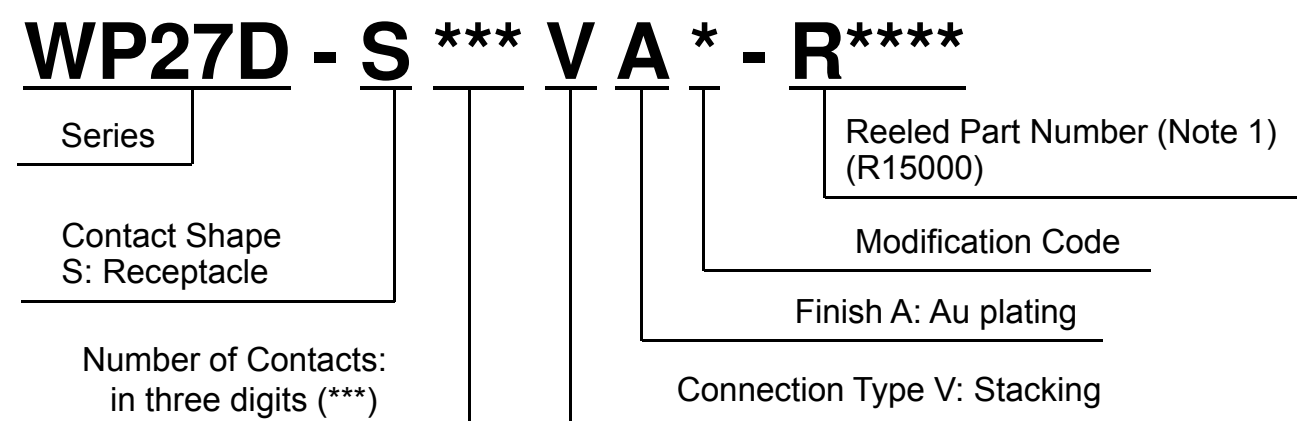
Materials and Finishes

Components	Materials	Finishes
Contact	Copper alloy	Au plating (Contact area) Au plating (Mounting area)
Insulator	Heat-resistant plastic	
Hold-down	Copper alloy	Au plating (Contact area) Au plating (Mounting area)

Ordering Information (Plug)



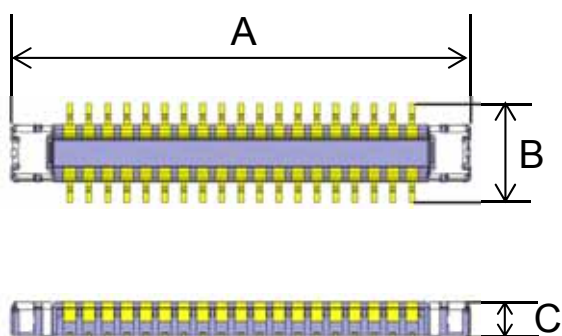
Ordering Information (Receptacle)



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

Outer Dimensions (Plug)

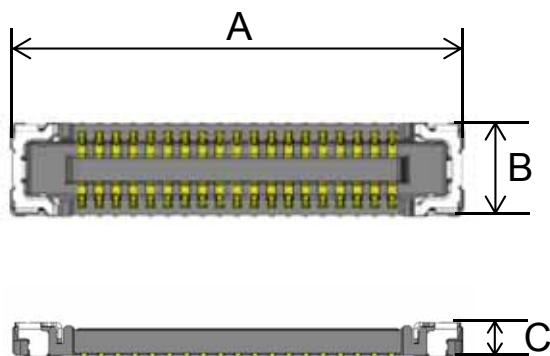
Unit: mm



Dimensions Number of Contact	A	B	C
10	3.57	1.81	0.57
24	6.02	1.81	0.57
30	7.07	1.81	0.57
34	7.77	1.81	0.57
38	8.47	1.81	0.57
40	8.82	1.81	0.57
50	10.57	1.81	0.57
60	12.32	1.81	0.57

Outer Dimensions (Receptacle)

Unit: mm



Dimensions Number of Contact	A	B	C
10	4.30	1.9	0.7
24	6.75	1.9	0.7
30	7.80	1.9	0.7
34	8.50	1.9	0.7
38	9.20	1.9	0.7
40	9.55	1.9	0.7
50	11.30	1.9	0.7
60	13.05	1.9	0.7

Product Drawings and Specifications

Part Number	Drawing Number	Specifications	Handling Instructions
WP27D-P *****-R15000 (Plug side)	SJ117892 (Individual Product)	JACS-11172	JAHL-11172
	SJ117893 (Reeled Product)		
WP27D-S *****-R15000 (Receptacle side)	SJ117894 (Individual Product)		
	SJ117895 (Reeled Product)		

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

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