

NEW



0.4mm Pitch, Stacking Type
Board-to-Board (FPC) Connector

CONNECTOR

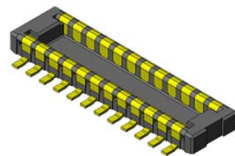
MB-0228-3

September 2017

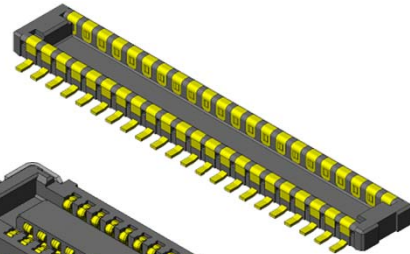
WP7 Series

RoHS Compliant

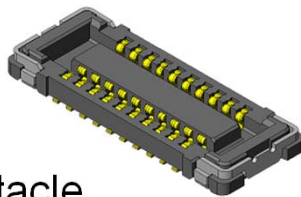
Plug



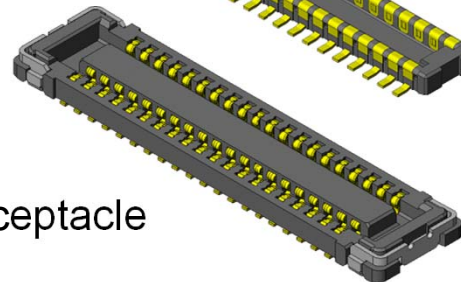
Plug



Receptacle



Receptacle



The WP7 Series is a low-profile board-to-board (FPC) connector with 0.4mm pitch spacing that is ideal for high-density mounting in slim information communication devices like mobile phones, smartphones, LCD, and notebook PC.

To satisfy different product function requirements, a low pin count type and a high pin count type (WP7A / WP7B) are available with the same mounting pattern.

Features

- 0.4mm pitch, 2 rows, 0.7mm stacking height.
- Contact structure ensures high wear-resistance and high contact reliability.
- Secure hold-downs prevent insulator breakage and peeling from FPC.
- 2-point contact design to resist twisting stress.
- Pb-free (Ni barrier on contact prevents solder wicking.)
- Receptacle contacts adopt an optimal configuration according to the pin counts.
High removal force WP7A (low pin count: 10-32 pos.)
Low insertion force WP7B (high pin count 34-70 pos.)
- Signal contact supports 10 Gbps transmission rate.
- Supports MIPI, USB3.1 Gen2, and PCIe Gen3 transmission.

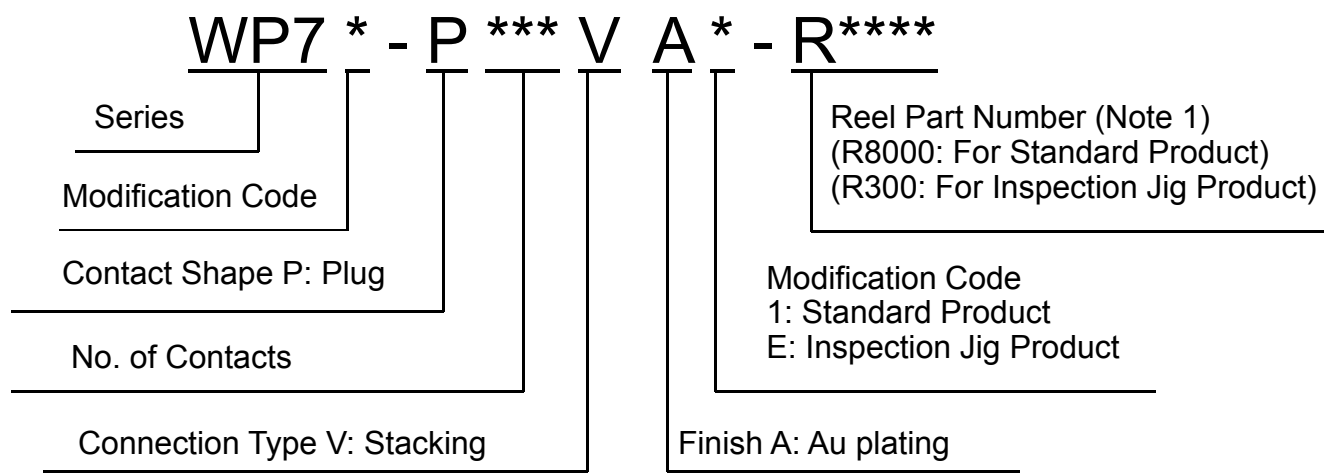
General Specifications

- | | |
|---|---|
| <ul style="list-style-type: none"> ■(WP7A) No. of Contacts:
10, 16, 20, 22, 24, 26,
28, 30, 32 pos. ■(WP7B) No. of Contacts:
34, 40, 50, 60, 70 pos. ■Pitch: 0.4mm, 2 rows ■Operating Temperature:
-40 Deg. C to +85 Deg. C ■Contact Resistance:
70mΩ max. (initial) ■Life Time: 30 mating cycles | <ul style="list-style-type: none"> ■Rated Current: AC, DC 0.3A each per terminal ■Rated Voltage: AC, DC 50V ■Insulation Resistance: 100MΩ min. (initial) ■Dielectric Withstanding Voltage:
AC250Vr.m.s for 1 minute ■(WP7A) total insertion force:
1.50N x n max. (n: No. of pos.) ■(WP7A) total removal force:
0.15N x n min. (n: No. of pos.) ■(WP7B) total insertion force:
1.00N x n max. (n: No. of pos.) ■(WP7B) total removal force:
0.10N x n min. (n: No. of pos.) |
|---|---|

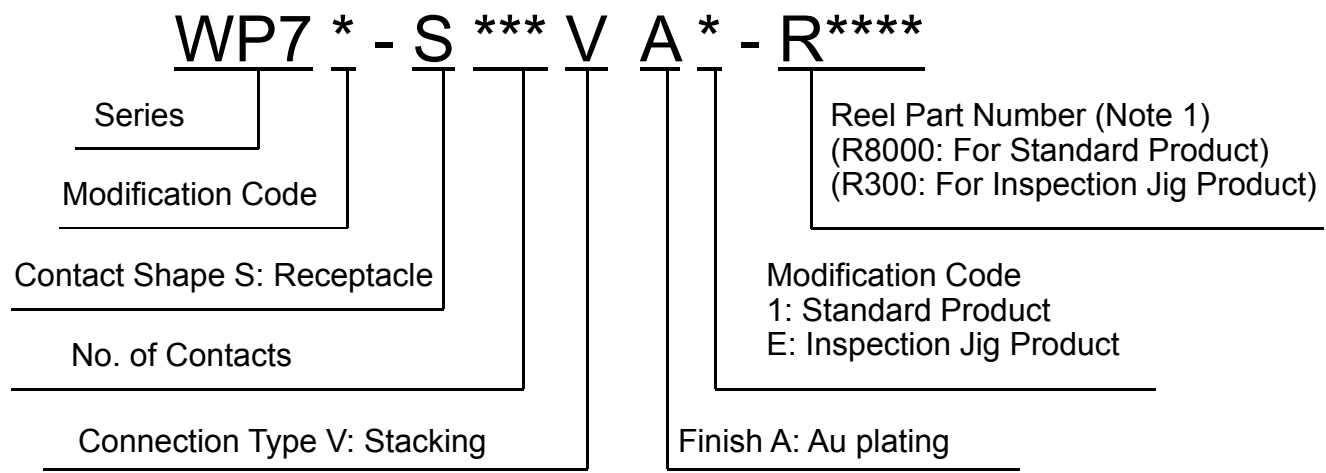
Materials and Finishes

Component	Material / Finish
Contact	Cu alloy / Au plating
Insulator	Heat-resistant plastic
Hold-Down	Plug: Cu alloy / Au plating Receptacle: Cu alloy / Sn plating

Ordering Information (Plug)



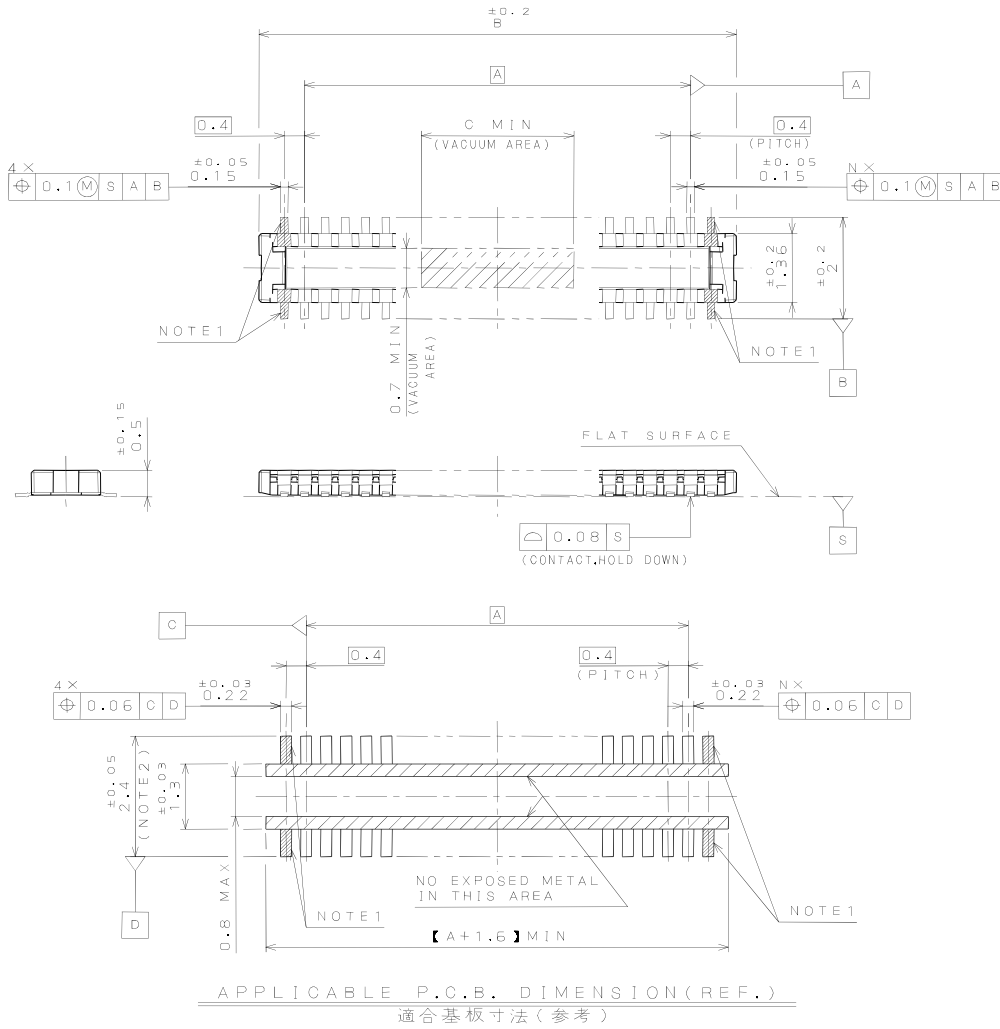
Ordering Information (Receptacle)



Note 1) An embossed tape reel contains 8,000 pieces of standard product, or 300 pieces of inspection jig product.
Please contact us for details on embossed tape specifications.

Part Number	WP7-P***VA1
SJ Drawing	SJ111875

WP7A Plug



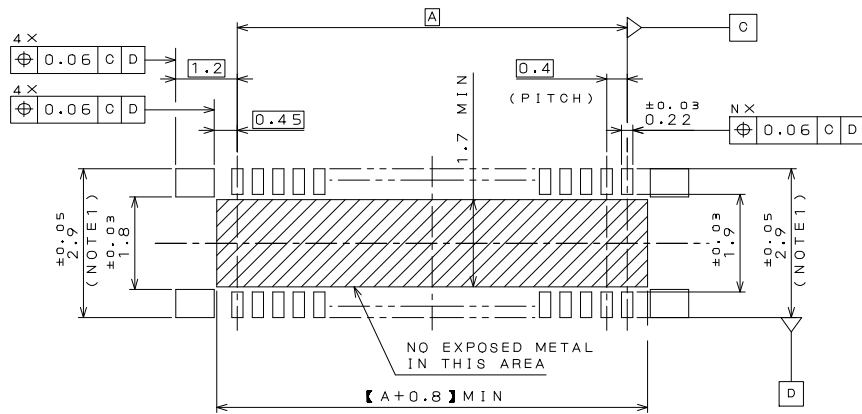
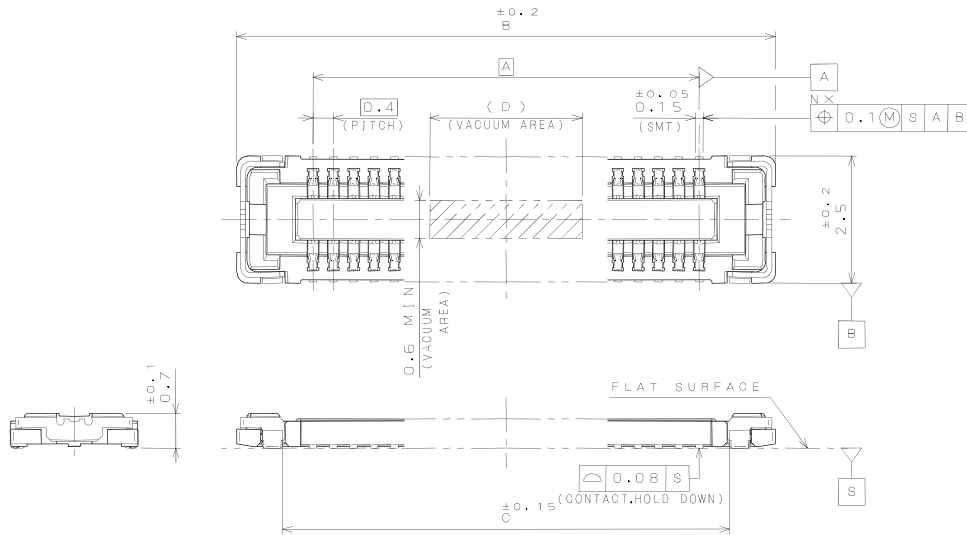
NUMBER OF CONTACT 芯数	DIMENSIONS 寸法		
	A	B	C
10	1.6	3.4	2.0
16	2.8	4.6	2.0
20	3.6	5.4	2.0
22	4.0	5.8	2.0
24	4.4	6.2	2.0
26	4.8	6.6	5.0
28	5.2	7.0	5.0
30	5.6	7.4	5.0
32	6.0	7.8	5.0

Note 1) Four corners are hold-downs. (Cannot be used for electrical connection.)
 ex. Connector with 10 (N) pos. will have same amount of SMT terminals as 14 (N+4) pos.

Note 2) Dimension 3 ± 0.05 is recommended in case repair is needed.

Part Number	WP7A-S***VA1
SJ Drawing	SJ111877

WP7A Receptacle



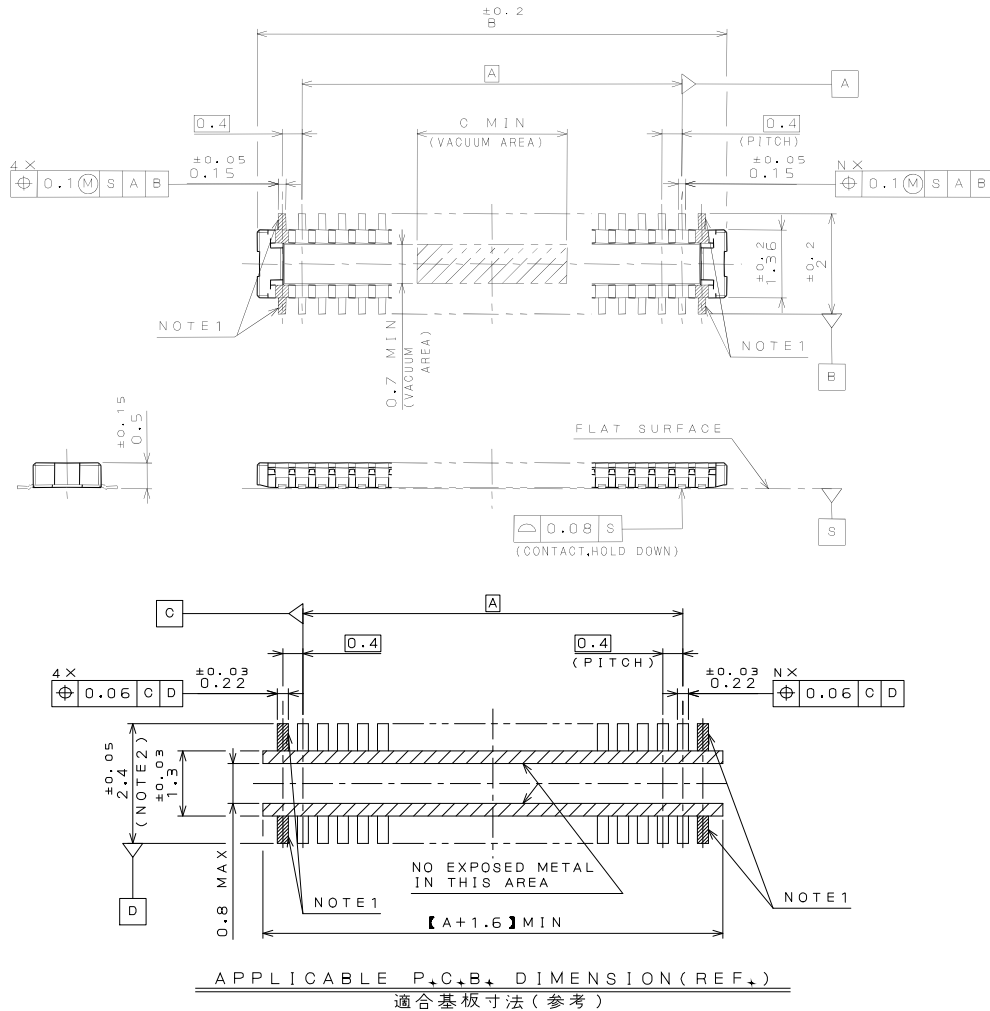
APPLICABLE P.C.B. DIMENSION (REF.)
適合基板寸法 (参考)

NUMBER OF CONTACT 芯数	DIMENSIONS 寸法			
	A	B	C	D
10	1.6	4.6	2.8	2.0
16	2.8	5.8	4.0	2.0
20	3.6	6.6	4.8	2.0
22	4.0	7.0	5.2	2.0
24	4.4	7.4	5.6	2.0
26	4.8	7.8	6.0	5.0
28	5.2	8.2	6.4	5.0
30	5.6	8.6	6.8	5.0
32	6.0	9.0	7.2	5.0

Note 1) Dimension 3.5 ± 0.05 is recommended in case repair is needed.

Part Number	WP7B-P***VA1
SJ Drawing	SJ111879

WP7B Plug



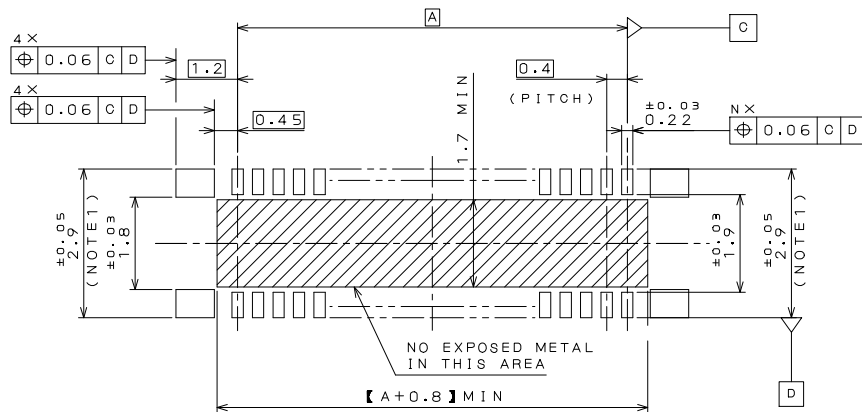
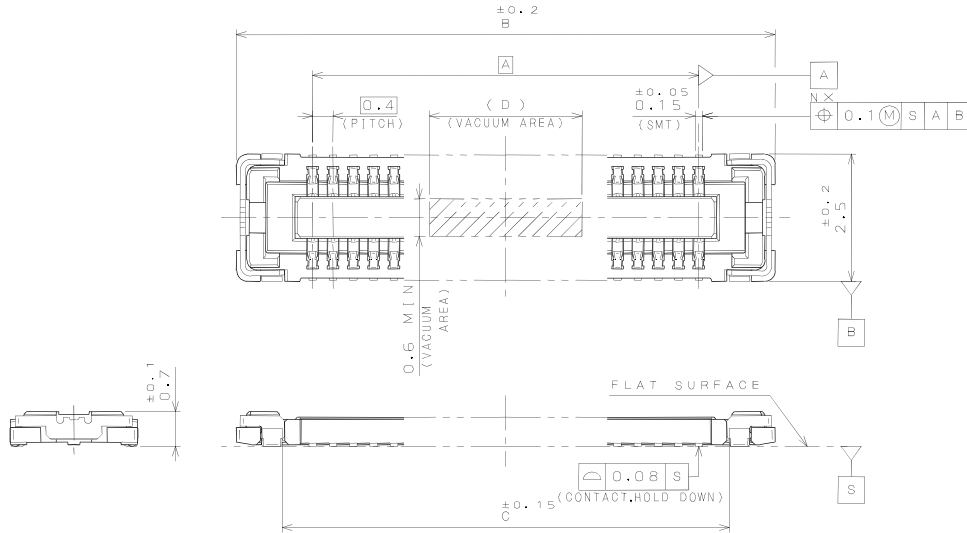
NUMBER OF CONTACT 芯数	DIMENSIONS 寸法		
	A	B	C
34	6.4	8.2	5.0
40	7.6	9.4	5.0
50	9.6	11.4	5.0
60	11.6	13.4	5.0
70	13.6	15.4	5.0

Note 1) Four corners are hold-downs. (Cannot be used for electrical connection.)
ex. Connector with 40 (N) pos. will have same amount of SMT terminals as 44 (N+4) pos.

Note 2) Dimension 3 ± 0.05 is recommended in case repair is needed.

Part Number	WP7B-S***VA1
SJ Drawing	SJ111881

WP7B Receptacle



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

NUMBER OF CONTACT 芯数	DIMENSIONS 寸法			
	A	B	C	D
34	6.4	9.4	7.6	5.0
40	7.6	10.6	8.8	5.0
50	9.6	12.6	10.8	5.0
60	11.6	14.6	12.8	5.0
70	13.6	16.6	14.8	5.0

Note 1) Dimension 3.5±0.05 is recommended in case repair is needed.

Product Line-up

Types	WP7A (10-32 pos.)	WP7B (34-70pos.)
Drawings (Plug)	Individual Product: SJ111875 Reel Product: SJ118068	Individual Product: SJ111879 Reel Product: SJ118070
Drawings (Receptacle)	Individual Product: SJ111877 Reel Product: SJ118069	Individual Product: SJ111881 Reel Product: SJ118071
Specifications	JACS-10814	JACS-10818
Handling Instructions	JAHL-10814	JAHL-10818
Summary Reports	SR-C-1023	SR-C-1024

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

Product Marketing Division

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539

Phone: +81-3-3780-2882 FAX: +81-3-3780-2946

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.