

**NEW**



0.4mm Pitch, Stacking Type  
Board-to-Board Connector

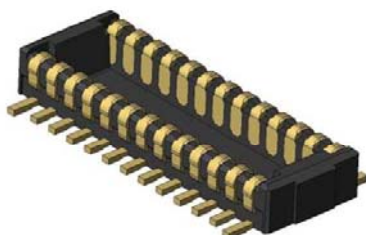
CONNECTOR

MB-0229-2

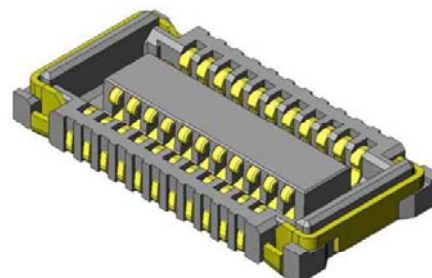
September 2014

## WP3 Series

**RoHS Compliant**



Plug



Receptacle

The WP3 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, and notebook PC.

### Features

- 16 to 80 pos., 0.4mm pitch, 2 rows, 1.0mm stacking height.
- Independent 2-point contact design to resist twisting stress.
- Contact structure ensures high wear-resistance and high contact reliability.
- Secure hold-downs prevent insulator breakage and peeling from FPC (receptacle side).
- Ni barrier on contact of both plug and receptacle prevents solder wicking.
- Pb-free.

\* Inspection jig connectors for both plug and receptacle are available. (Note 1)

### General Specifications

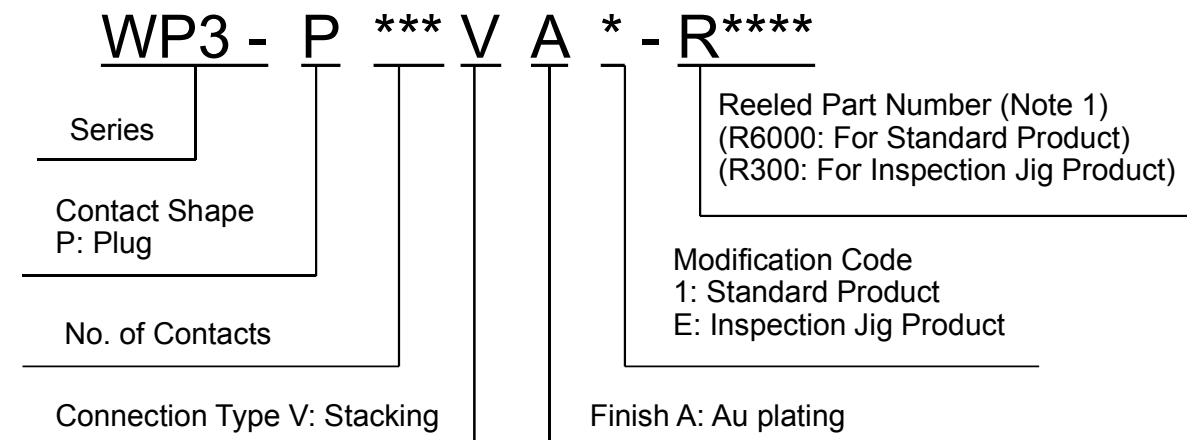
- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>■No. of Contacts:<br/>16, 20, 22, 24, 30, 36, 40, 42,<br/>50, 64, 70, 80 pos.</li> <li>■Pitch: 0.4mm, 2 rows</li> <li>■Operating Temperature:<br/>-40 Deg. C to +85 Deg. C</li> <li>■Contact Resistance:<br/>70mΩ max (initial)</li> <li>■Life Time: 50 mating cycles</li> </ul> | <ul style="list-style-type: none"> <li>■Rated Current:<br/>AC, DC 0.4A each per terminal</li> <li>■Rated Voltage: AC, DC 50V</li> <li>■Insulation Resistance: 100M Ω min. (initial)</li> <li>■Dielectric Withstanding Voltage:<br/>AC250Vr.m.s for 1 minute</li> <li>■Total Insertion Force:<br/>1.5N x n max. (n: No. of pos.)</li> <li>■Total Extraction Force:<br/>0.2N x n min. (n: No. of pos.)</li> </ul> |
|---|---|

Note1) Please contact us for details on inspection jig connector specifications.

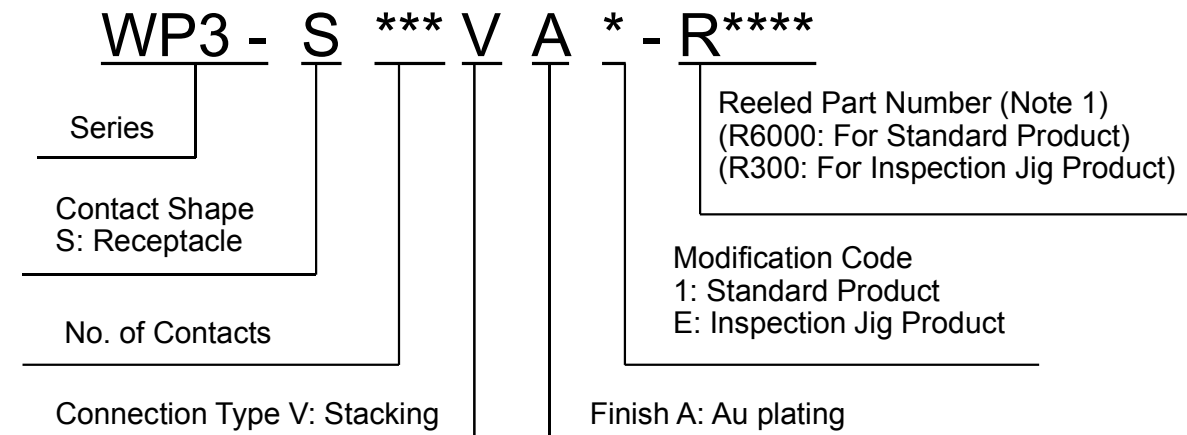
Materials and Finishes

Component	Material / Finish
Contact	(Contact area) Cu alloy / Au plating (0.1 μm min.) (Mounting area) Cu alloy / Au plating (0.05 μm min.)
Insulator	Heat-resistant plastic
Hold-Down	Plug: Cu alloy / Au plating (0.1 μm min.) Receptacle: Cu alloy / Sn plating

Ordering Information (Plug)

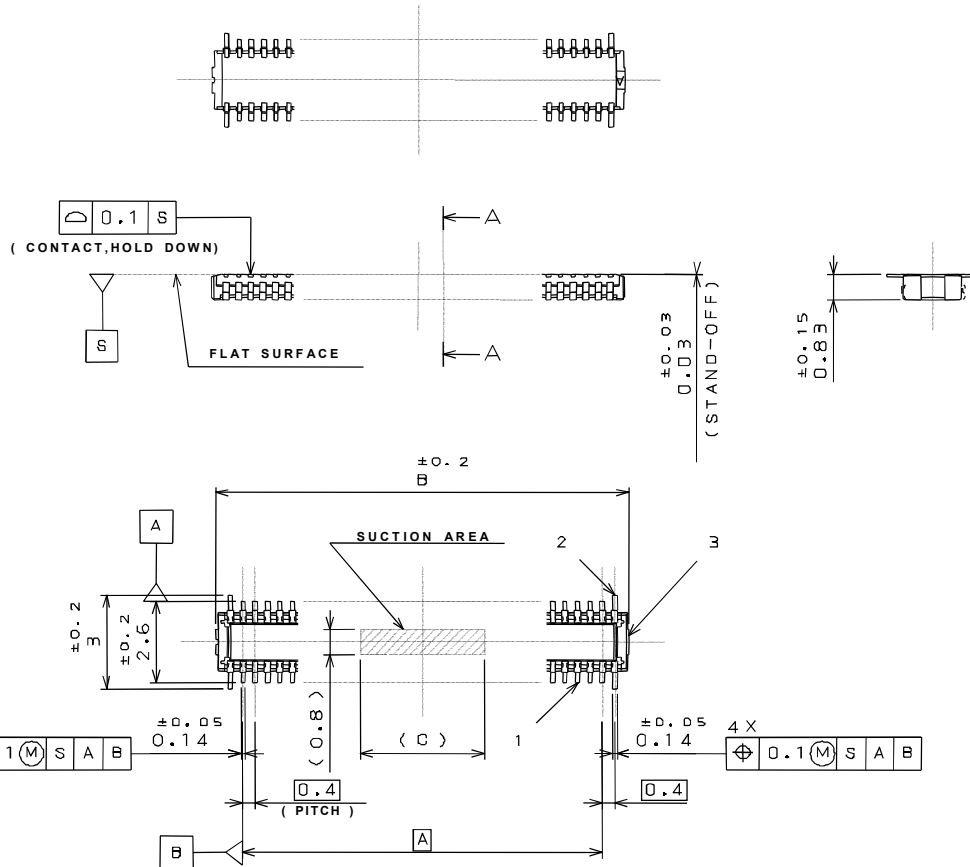
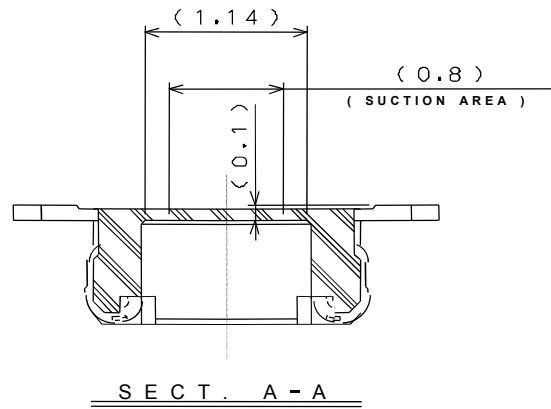


Ordering Information (Receptacle)



Note 1) An embossed tape reel contains 6,000 pieces of standard product, or 300 pieces of inspection jig product. Please contact us for details on embossed tape specifications.

Part Number	WP3-P***VA1
SJ Drawing	SJ111555



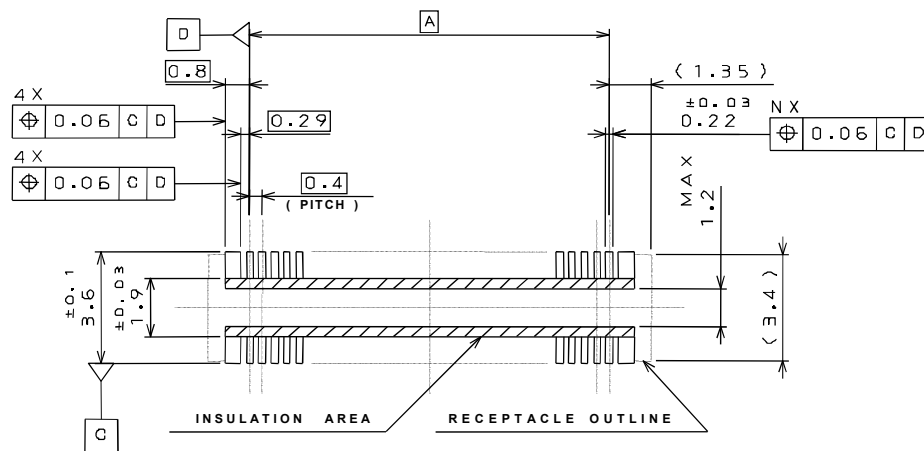
No. of Contacts	A	B	C
16	2.8	4.5	2.0
20	3.6	5.3	2.0
22	4.0	5.7	2.0
24	4.4	6.1	2.0
30	5.6	7.3	2.0
36	6.8	8.5	2.0
40	7.6	9.3	2.0
42	8.0	9.7	2.0
50	9.6	11.3	2.0
64	12.4	14.1	4.0
70	13.6	15.3	4.0
80	15.6	17.3	4.0

Note 1) Coplanarity: 0.1mm max.

Note 2) An embossed tape reel contains 6,000 pieces.

Please contact us for details on embossed tape specifications.

Part Number	WP3-P***VA1
SJ Drawing	SJ111555

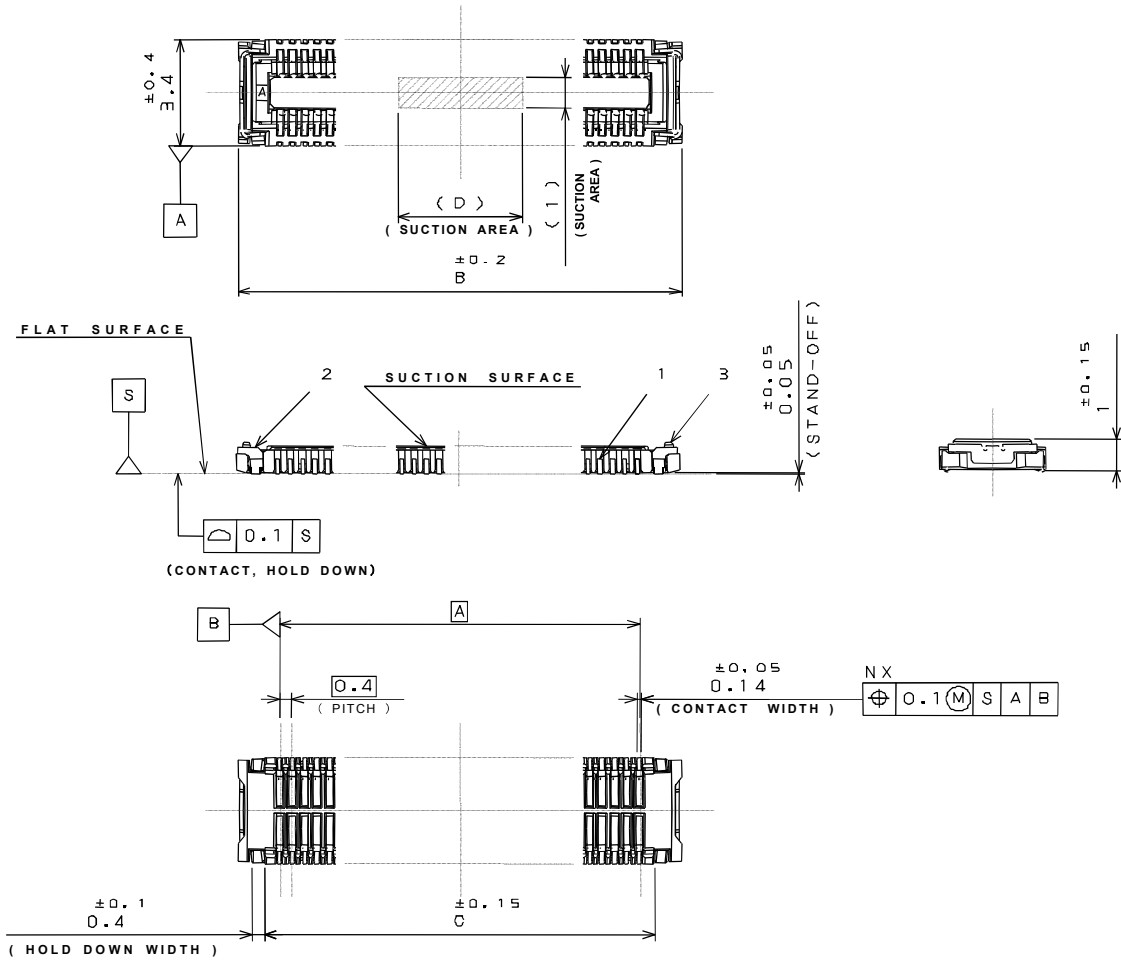
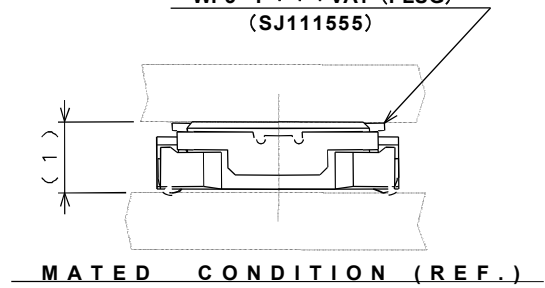


Applicable Dimensions of Board  
(For reference)

Note 1) Dimension  $3.0 \pm 0.05$  is recommended in case repair is not needed.

Part Number	WP3-S***VA1
SJ Drawing	SJ111557

WP3-P\*\*\*VA1 (PLUG)  
(SJ111555)



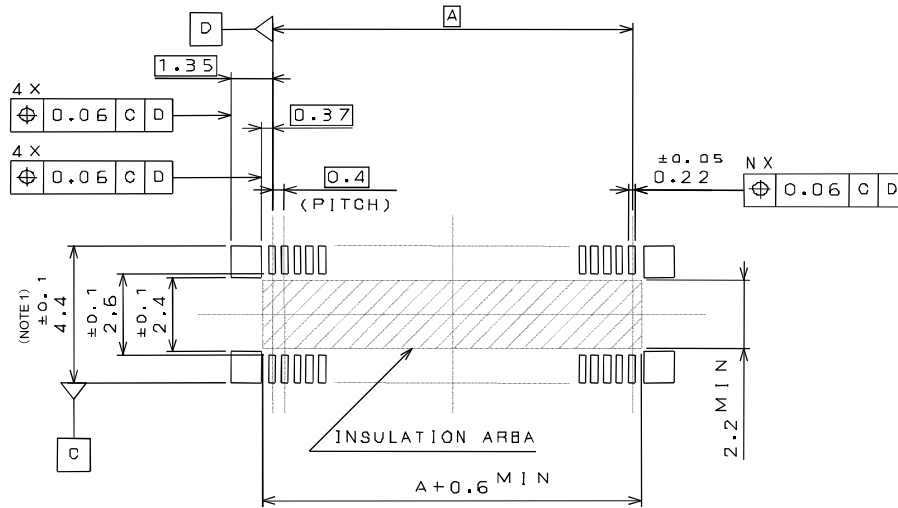
No. of Contacts	A	B	C	D
16	2.8	5.5	3.8	2.0
20	3.6	6.3	4.6	2.0
22	4.0	6.7	5.0	2.0
24	4.4	7.1	5.4	2.0
30	5.6	8.3	6.6	2.0
36	6.8	9.5	7.8	2.0
40	7.6	10.3	8.6	2.0
42	8.0	10.7	9.0	2.0
50	9.6	12.3	10.6	2.0
64	12.4	15.1	13.4	4.0
70	13.6	16.3	14.6	4.0
80	15.6	18.3	16.6	4.0

Note 1) Coplanarity: 0.1mm max.

Note 2) An embossed tape reel contains 6,000 pieces.

Please contact us for details on embossed tape specifications.

Part Number	WP3-S***VA1
SJ Drawing	SJ111557



Applicable Dimensions of Board  
(For reference)

Note 1) Dimension  $3.8 \pm 0.05$  is recommended in case repair is not needed.

Technical Documents
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Series	WP3
SJ Drawing No. (Plug)	Individual Product: SJ111555 Reeled Product: SJ111554
SJ Drawing No. (Receptacle)	Individual Product: SJ111557 Reeled Product: SJ111556
Specifications	JACS-10780
Handling Instructions	JAHL-10780
Summary Report	SR-C-1021

**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 :  
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  - (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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