

**NEW**



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

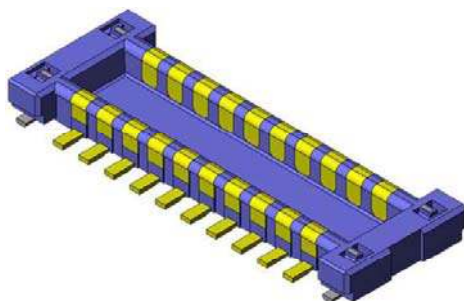
CONNECTOR

MB-0230-2

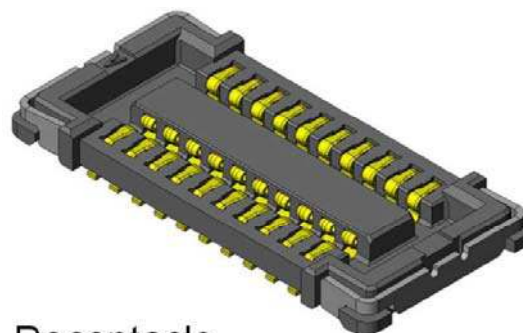
March 2014

## WP6 Series

**RoHS Compliant**



Plug



Receptacle

The WP6 Series is a low-profile stacking type 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. To satisfy different product function requirements, plug and receptacle with different heights (mating height: 0.6mm, 0.8mm) are available with the same mounting pattern.

### Features

- 0.4mm pitch, 2 rows, stacking height 0.6mm and 0.8mm.
  - 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.
- \* Inspection jig connector for both plug and receptacle are available. (Note 1)

### General Specifications

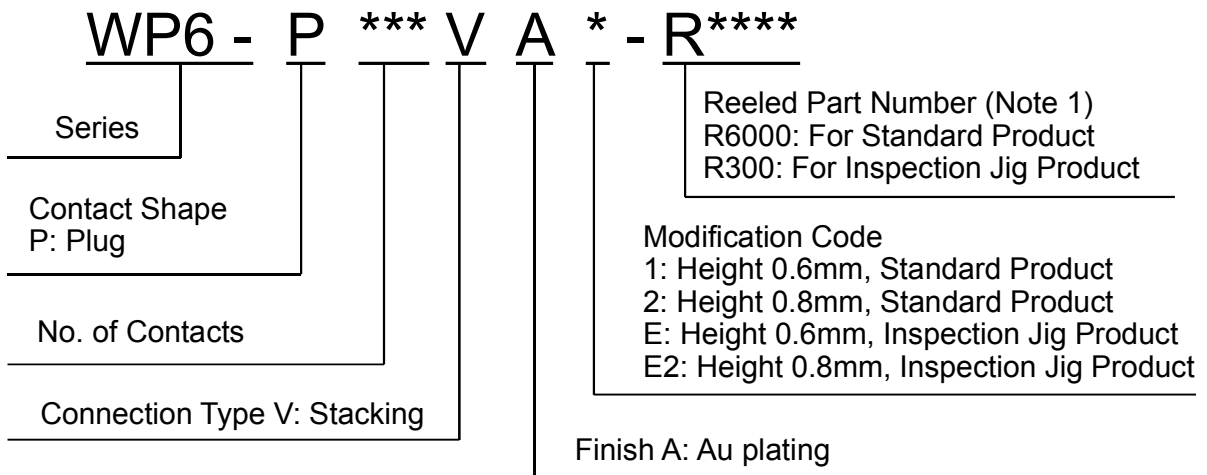
- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>■No. of Contacts: 10 to 80 pos.<br/>(Please refer to Development Status on the last page regarding development of contacts.)</li> <li>■Pitch: 0.4mm, 2 rows</li> <li>■Operating Temperature:<br/>-40 Deg. C to +85 Deg. C</li> <li>■Contact Resistance: 70mΩ max (initial)</li> <li>■Life Time: 30 mating cycles</li> </ul> | <ul style="list-style-type: none"> <li>■Rated Current:<br/>AC, DC 0.3A each per terminal</li> <li>■Rated Voltage: AC, DC 50V</li> <li>■Insulation Resistance: 100MΩ min. (initial)</li> <li>■Dielectric Withstanding Voltage:<br/>AC250Vr.m.s for 1 minute</li> </ul> |
| <ul style="list-style-type: none"> <li>■Total Insertion Force: 1.5N x n max. (n: No. of pos.)</li> <li>■Total Extraction Force: 0.1N x n min. (n: No. of pos.)</li> <li>■Less than 20 pos. Total Insertion Force: 2.5N x n max. (n: No. of pos.)</li> <li>■Less than 20 pos. Total Extraction Force: 0.2N x n min. (n: No. of pos.)</li> </ul>                     |   |

Note 1) Please contact us for specifications of inspection jig connector.

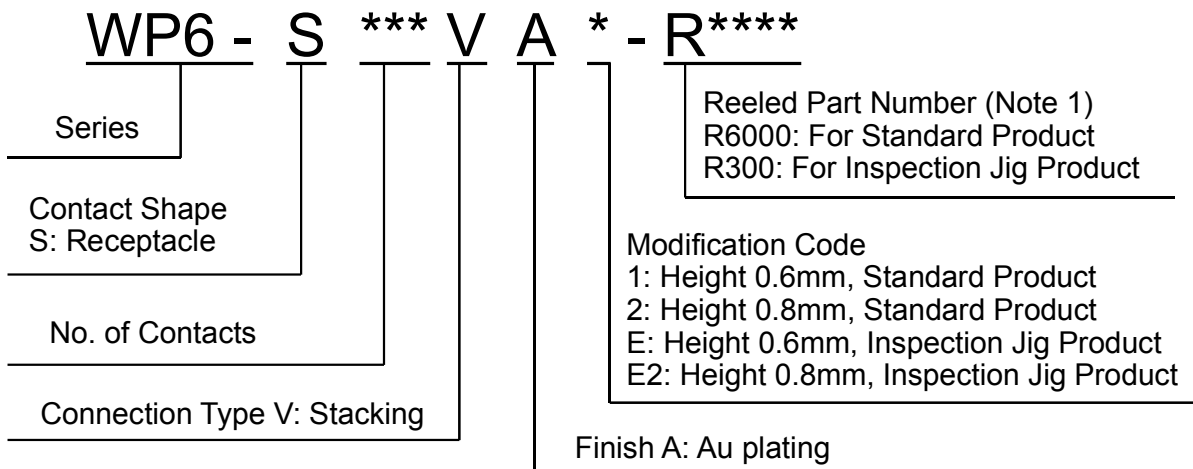
Materials and Finishes

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)



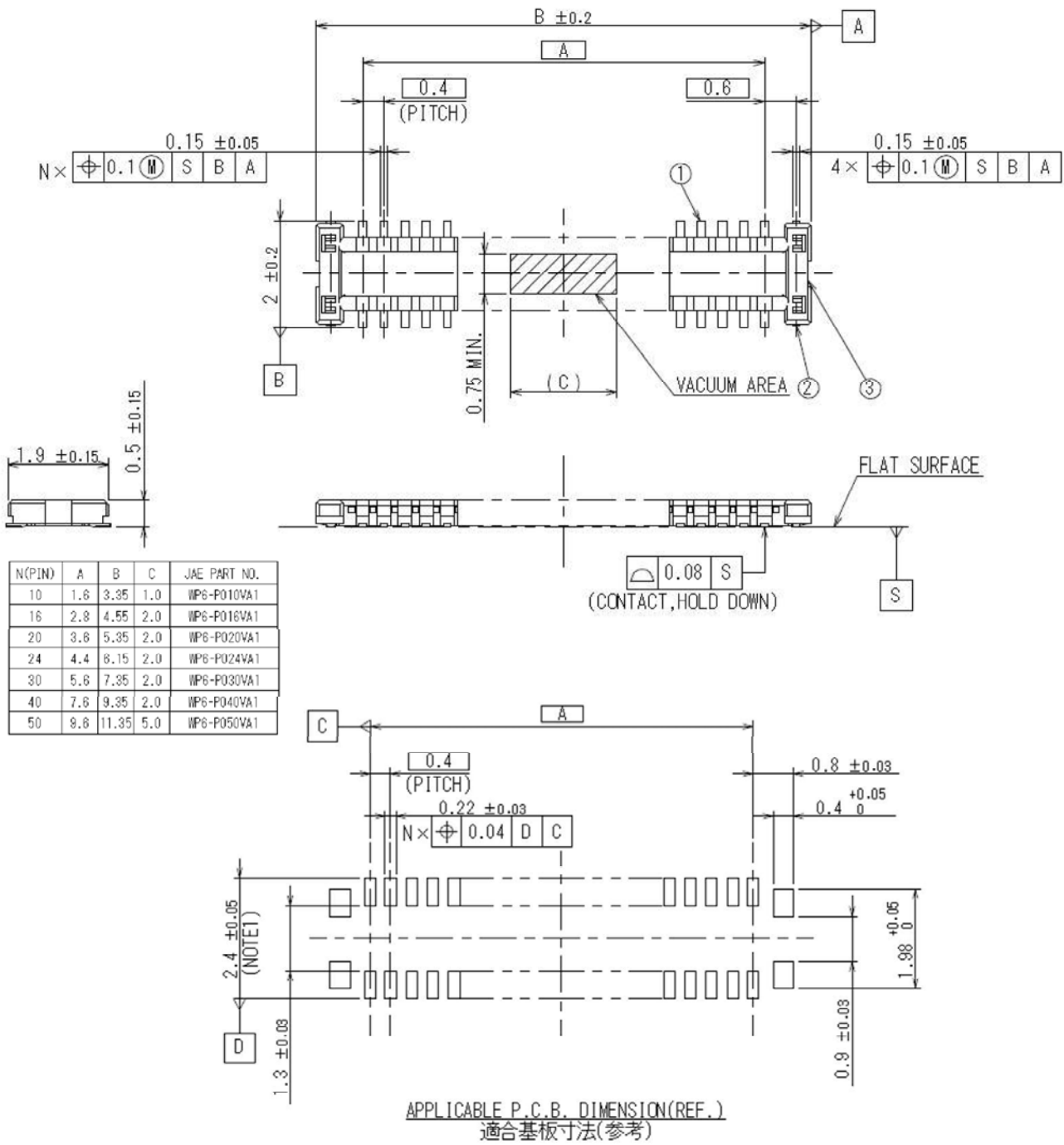
Ordering Information (Receptacle)



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	WP6-P***VA1
SJ Drawing	SJ111683

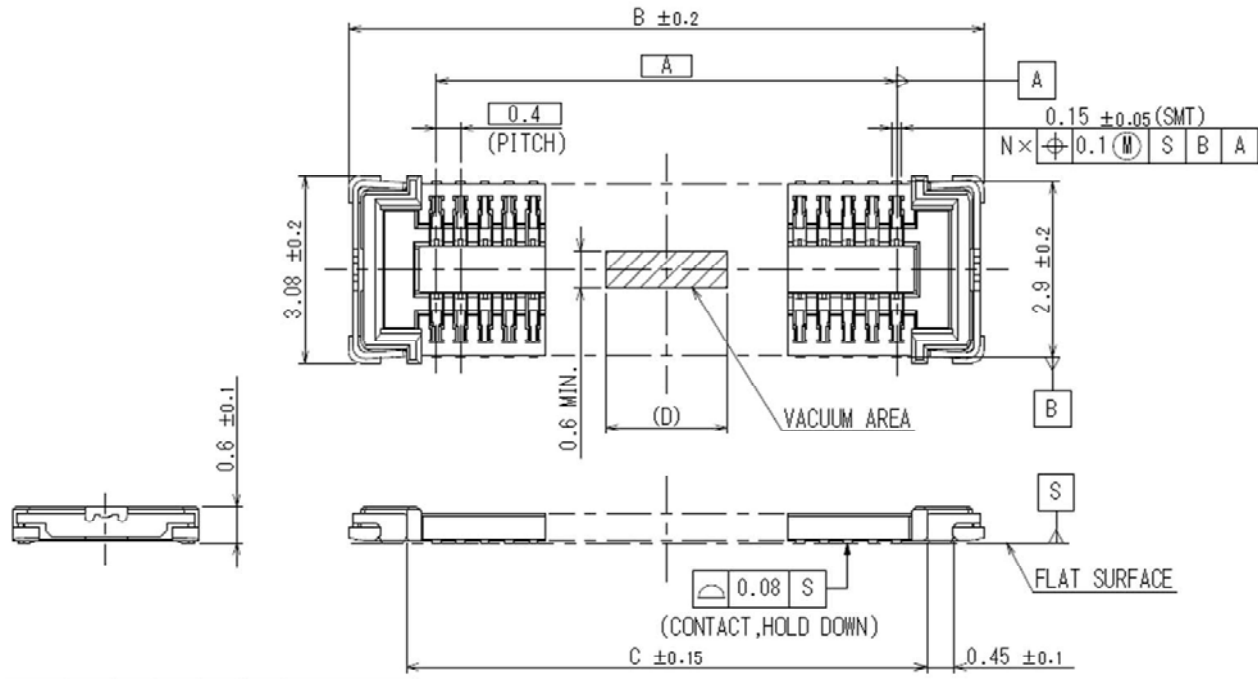
WP6 (Height 0.6mm) Plug



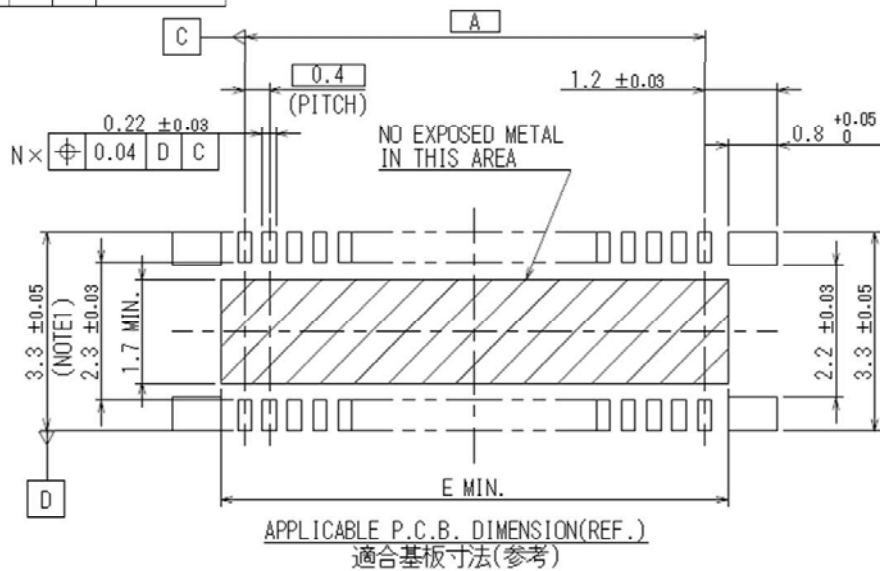
Note 1) Dimension 3 ± 0.05 is recommended in case repair is needed.

Part Number	WP6-S***VA1
SJ Drawing	SJ111684

WP6 (Height 0.6mm) Receptacle



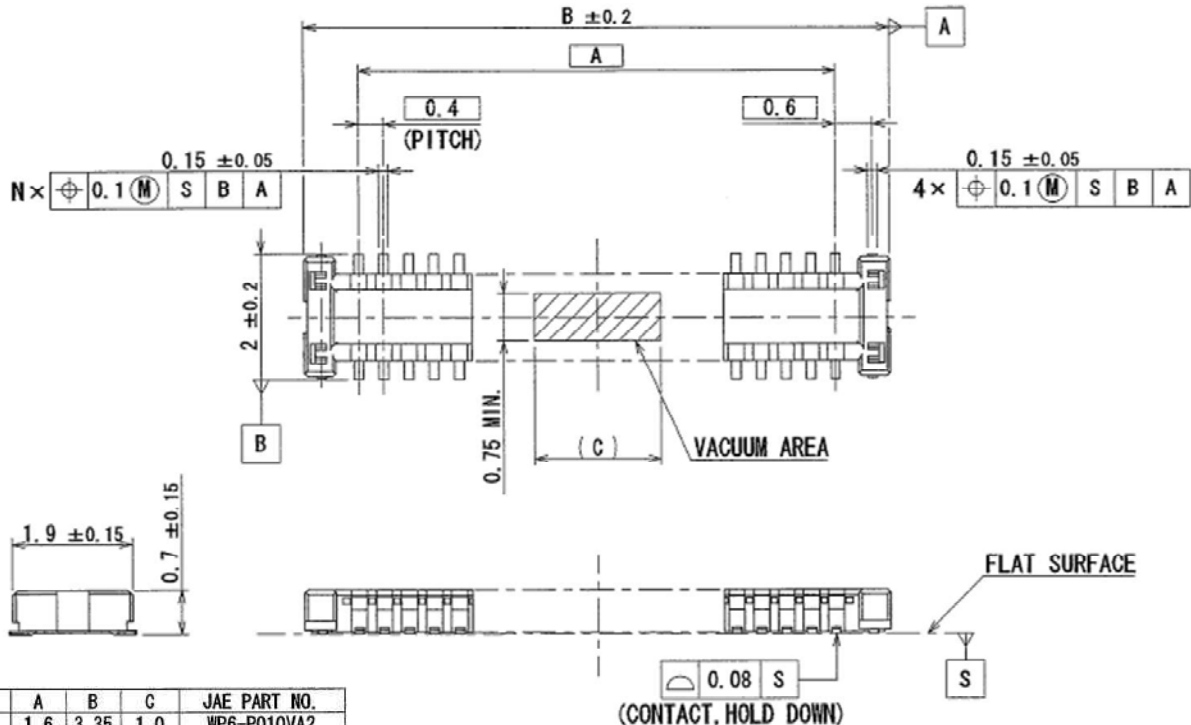
N(PIN)	A	B	C	D	E	JAE PART NO.
10	1.6	2.6	4.5	1.0	2.4	WP6-S010VA1
16	2.8	3.8	5.7	2.0	3.6	WP6-S016VA1
20	3.6	4.6	6.5	2.0	4.4	WP6-S020VA1
24	4.4	5.4	7.3	2.0	5.2	WP6-S024VA1
30	5.6	6.8	8.5	2.0	6.4	WP6-S030VA1
40	7.6	8.6	10.5	2.0	8.4	WP6-S040VA1
50	9.6	10.6	12.5	5.0	10.4	WP6-S050VA1



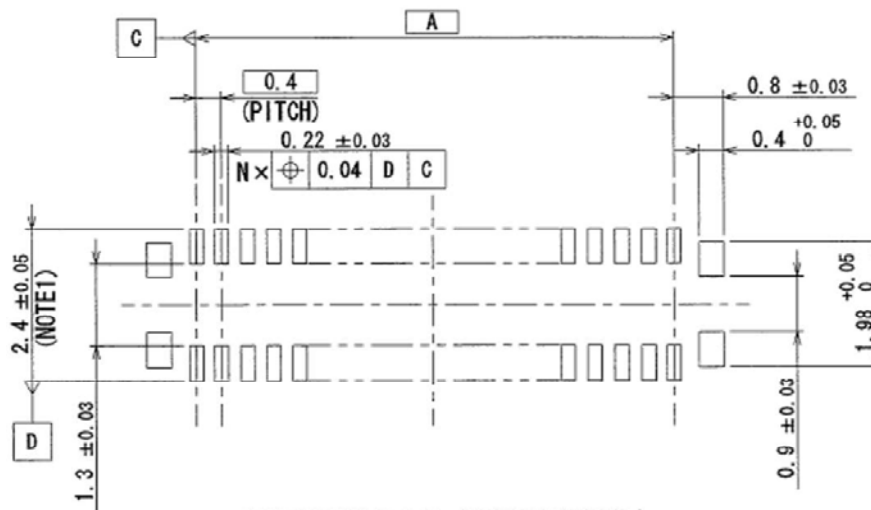
Note 1) Dimension  $3.9 \pm 0.05$  is recommended in case repair is needed.

Part Number	WP6-P***VA2
SJ Drawing	SJ111687

WP6 (Height 0.8mm) Plug



N (PIN)	A	B	C	JAE PART NO.
10	1.6	3.35	1.0	WP6-P010VA2
16	2.8	4.55	2.0	WP6-P016VA2
20	3.6	5.35	2.0	WP6-P020VA2
24	4.4	6.15	2.0	WP6-P024VA2
30	5.6	7.35	2.0	WP6-P030VA2
40	7.6	9.35	2.0	WP6-P040VA2
50	9.6	11.35	5.0	WP6-P050VA2

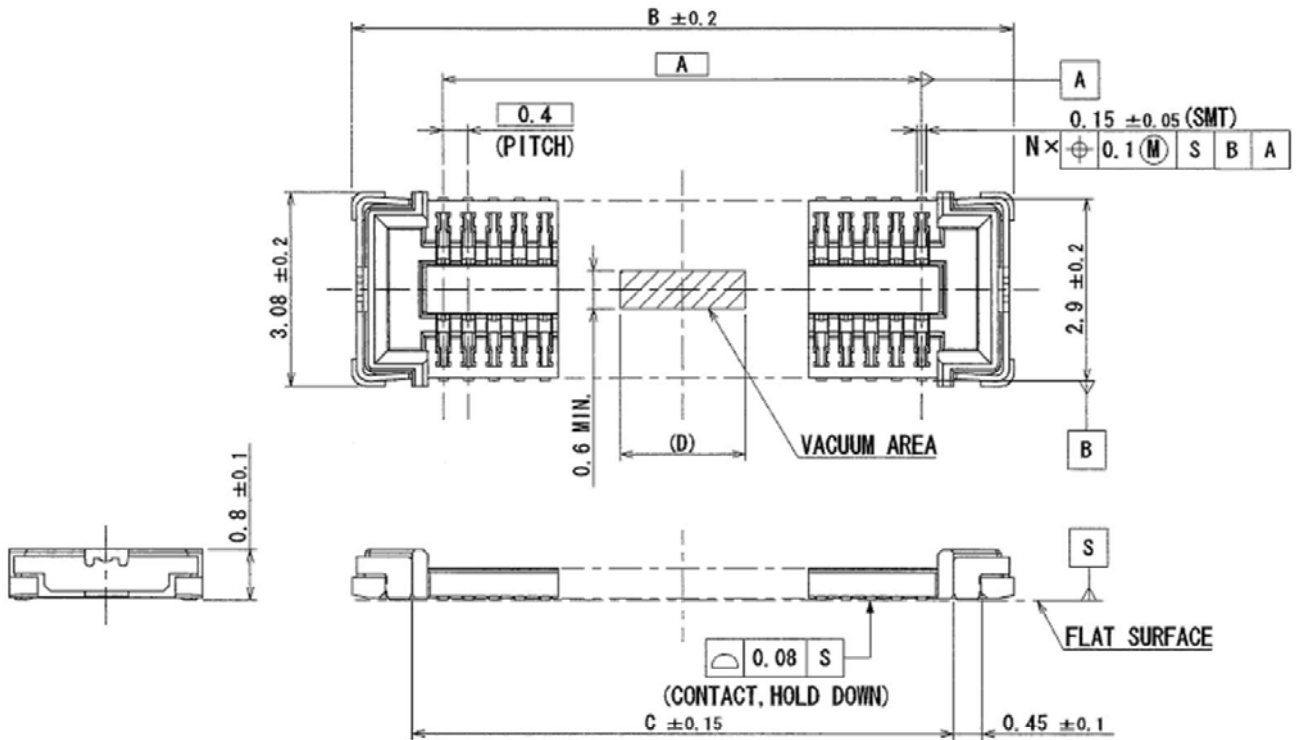


APPLICABLE P. C. B. DIMENSION (REF.)  
適合基板寸法 (参考)

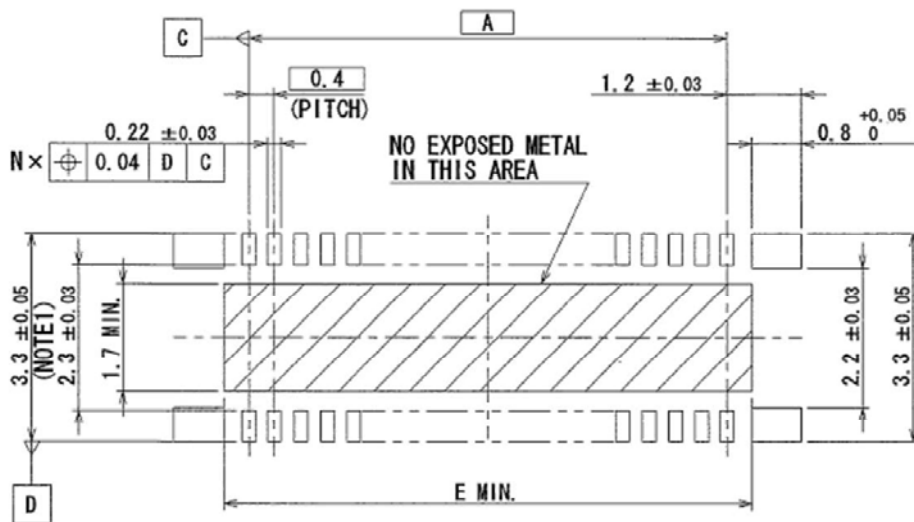
Note 1) Dimension  $3 \pm 0.05$  is recommended in case repair is needed.

Part Number	WP6-S***VA2
SJ Drawing	SJ111688

WP6 (Height 0.8mm) Receptacle



N (PIN)	A	B	C	D	E	JAE PART NO.
10	1.6	4.5	2.6	1.0	2.4	WP6-S010VA2
16	2.8	5.7	3.8	2.0	3.6	WP6-S016VA2
20	3.6	6.5	4.6	2.0	4.4	WP6-S020VA2
24	4.4	7.3	5.4	2.0	5.2	WP6-S024VA2
30	5.6	8.5	6.6	2.0	6.4	WP6-S030VA2
40	7.6	10.5	8.6	2.0	8.4	WP6-S040VA2
50	9.6	12.5	10.6	5.0	10.4	WP6-S050VA2



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

Note 1) Dimension  $3.9 \pm 0.05$  is recommended in case repair is needed.

## Technical Documents

Series	WP6
Drawing No. (Plug, Height 0.6mm)	Individual Product: SJ111683 Embossed Reel: SJ111685
Drawing No. (Receptacle, Height 0.6mm)	Individual Product: SJ111684 Embossed Reel: SJ111686
Drawing No. (Plug, Height 0.8mm)	Individual Product: SJ111687 Embossed Reel: SJ111689
Drawing No. (Receptacle, Height 0.8mm)	Individual Product: SJ111688 Embossed Reel: SJ111690
Specification	JACS-10797
Handling Instruction	JAHL-10798
Summary Report	SR-C-1002

Development Status
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No. of Contacts	Height 0.6mm	Height 0.8mm
10	Samples available	Now in mass-production
12		Now in mass-production
14	Now in mass-production	
16	Samples available	Now in mass-production
20	Samples available	Now in mass-production
24	Now in mass-production	Now in mass-production
26	Samples available	
30	Samples available	Now in mass-production
34	Samples available	
40	Samples available	Samples available
50	Samples available	Now in mass-production
60	Now in mass-production	Samples available
80	Samples available	Samples available

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**Notice:** Products shown in this brochure are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.