

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**

■No. of Contacts: 10 to 80 pos. (Please refer to Development Status on the last page regarding development of contacts.)

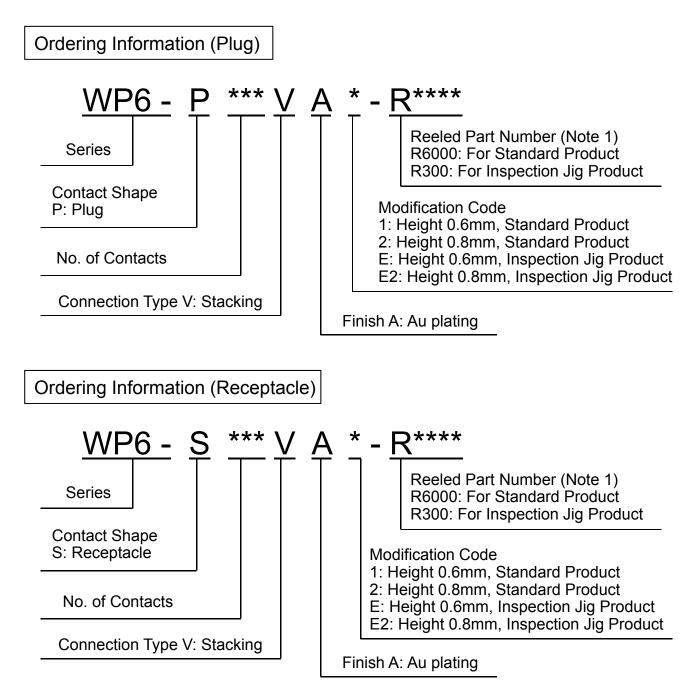
- ■Pitch: 0.4mm, 2 rows
- Operating Temperature: -40 Deg. C to +85 Deg. C
  Contact Resistance: 70mΩ max (initial)
  Life Time: 30 mating cycles
- Rated Current:
  - AC, DC 0.3A each per terminal
- ■Rated Voltage: AC, DC 50V
- ■Insulation Resistance: 100MΩ min. (initial)
- Dielectric Withstanding Voltage: AC250Vr.m.s for 1 minute

■Total Insertion Force: 1.5N x n max. (n: No. of pos.)

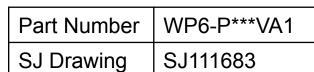
- Total Extraction Force: 0.1N x n min. (n: No. of pos.)
- Less than 20 pos. Total Insertion Force: 2.5N x n max. (n: No. of pos.)
- Less than 20 pos. Total Extraction Force: 0.2N x n min. (n: No. of pos.)

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

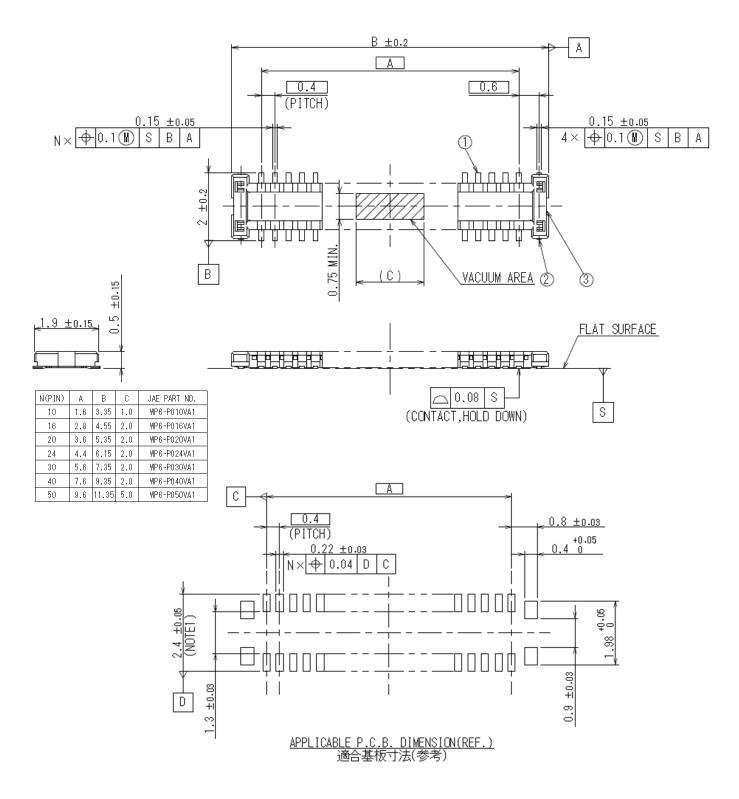
Materials and Finishes							
Component	Material / Finish						
Contact	Contact area: Cu alloy / Au plating (0.1 µm min.) Mounting area: Cu alloy / Au plating (0.05 µm min.)						
Insulator	Heat-resistant plastic						
Hold-Down	Plug: Cu alloy / Au plating (0.1µm min.) Receptacle: Cu alloy / Sn plating						



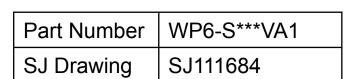
Note 1) An embossed tape reel contains 6,000 pieces of standard product, or 300 pieces of inspection jig product. Please contact us for details on embossed tape specifications.



# WP6 (Height 0.6mm) Plug



Note 1) Dimension  $3\pm0.05$  is recommended in case repair is needed.



N(PIN)

10

16

20

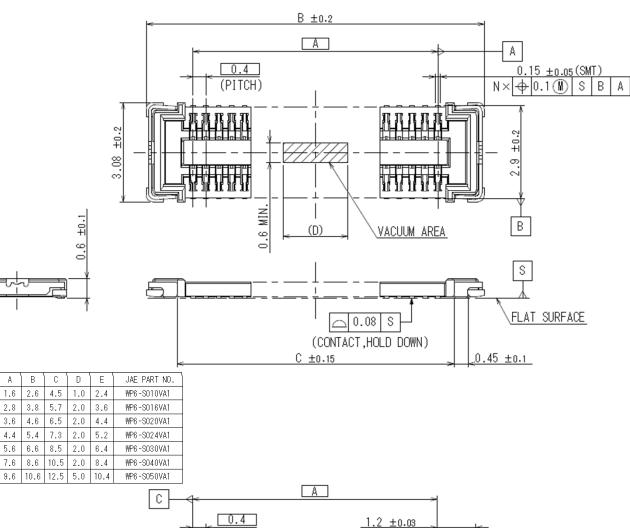
24

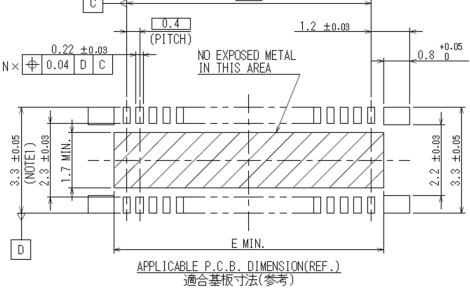
30

40

50

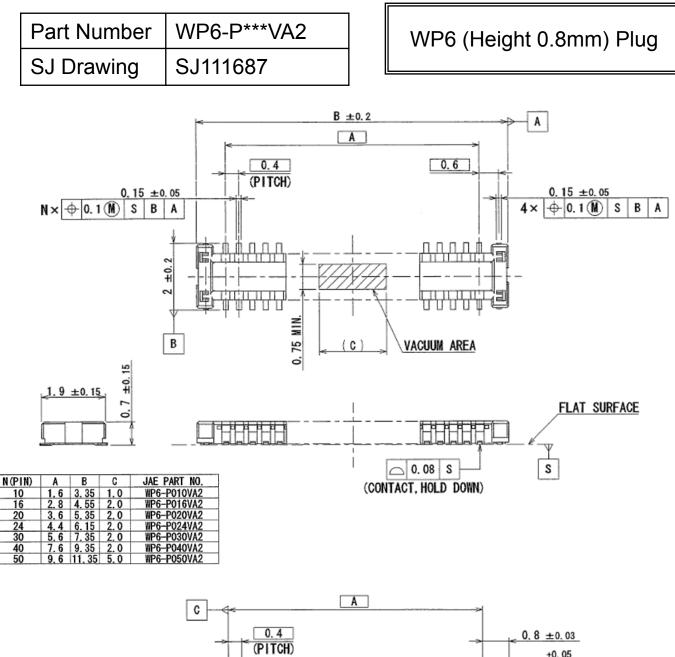
# WP6 (Height 0.6mm) Receptacle

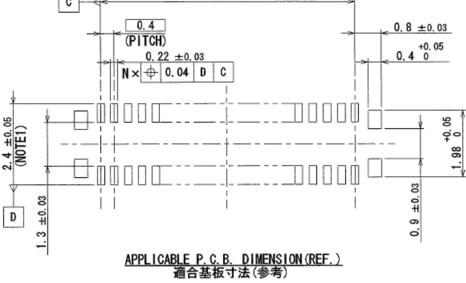




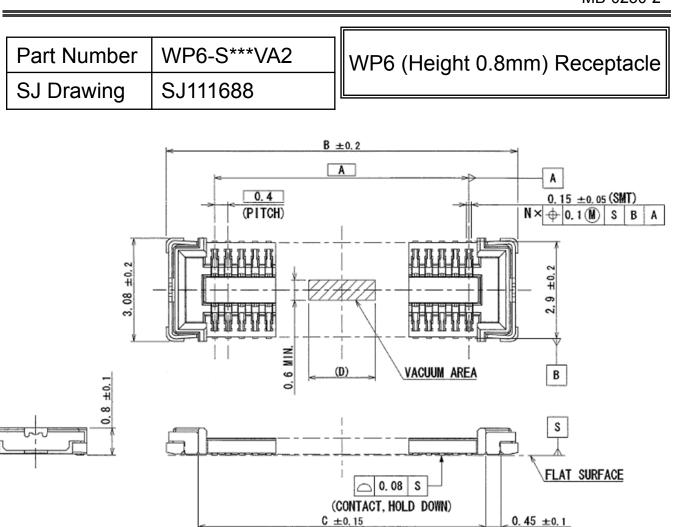
Note 1) Dimension  $3.9 \pm 0.05$  is recommended in case repair is needed.

#### MB-0230-2

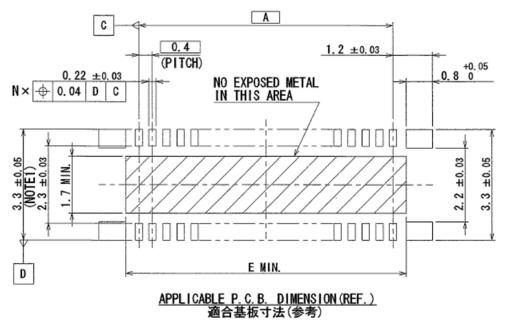




Note 1) Dimension  $3\pm0.05$  is recommended in case repair is needed.



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



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

## Technical Documents

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

**Development Status** 

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

### Japan Aviation Electronics Industry, Limited

Product Marketing Division Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946 **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.