NEW

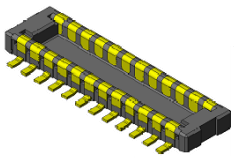
0.4mm Pitch, Stacking Type
Board-to-Board (FPC) Connector

WP7 Series

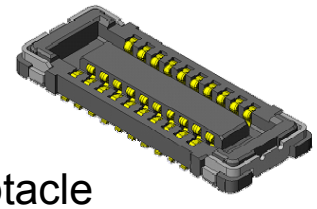
CONNECTOR
MB-0228-1
September 2011

RoHS Compliant

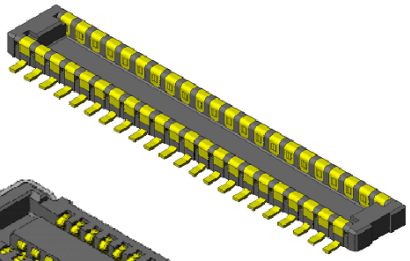
Plug



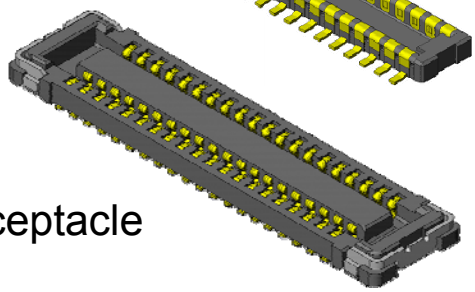
Receptacle



Plug



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, LCDs, notebook PCs, and PDAs.
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.
- High removal force WP7A for (low pin count: 10-30 pos.)
- Low insertion force WP7B for (high pin count 40-70 pos.)

* Mounting pattern for WP7A and WP7B is the same.

General Specifications

■(WP7A) No. of Contacts:
10, (16), (20), 26, 30 pos.
■(WP7B) No. of Contacts:
40, 50, 60, 70 pos.

Note: () are planned to be developed

■Pitch: 0.4mm, 2 rows
■Operating Temperature:
-40 Deg. C to +85 Deg. C
■Contact Resistance: 70mΩ max. (initial)
■Life Time: 50 mating cycles
■Rated Current: AC, DC 0.2A each per terminal
■Rated Voltage: AC, DC 50V
■Insulation Resistance: 100MΩ min. (initial)
■Dielectric Withstanding Voltage:
AC250Vr.m.s per 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 (0.1 μm min.)
Insulator	Heat-resistant plastic
Hold-Down	Plug: Cu alloy / Au plating (0.1μm min.) Receptacle: Cu alloy / Sn plating

Ordering Information (Plug)

WP7 * - P *** V A * - R****

- Series
- Modification Code
- Contact Shape P: Plug
- No. of Contacts
- Connection Type V: Stacking
- Finish A: Au plating
- Modification Code
  1: Standard Product
  E: Inspection Jig Product
- Reel Part Number (Note 1)
  (R6000: For Standard Product)
  (R300: For Inspection Jig Product)

Ordering Information (Receptacle)

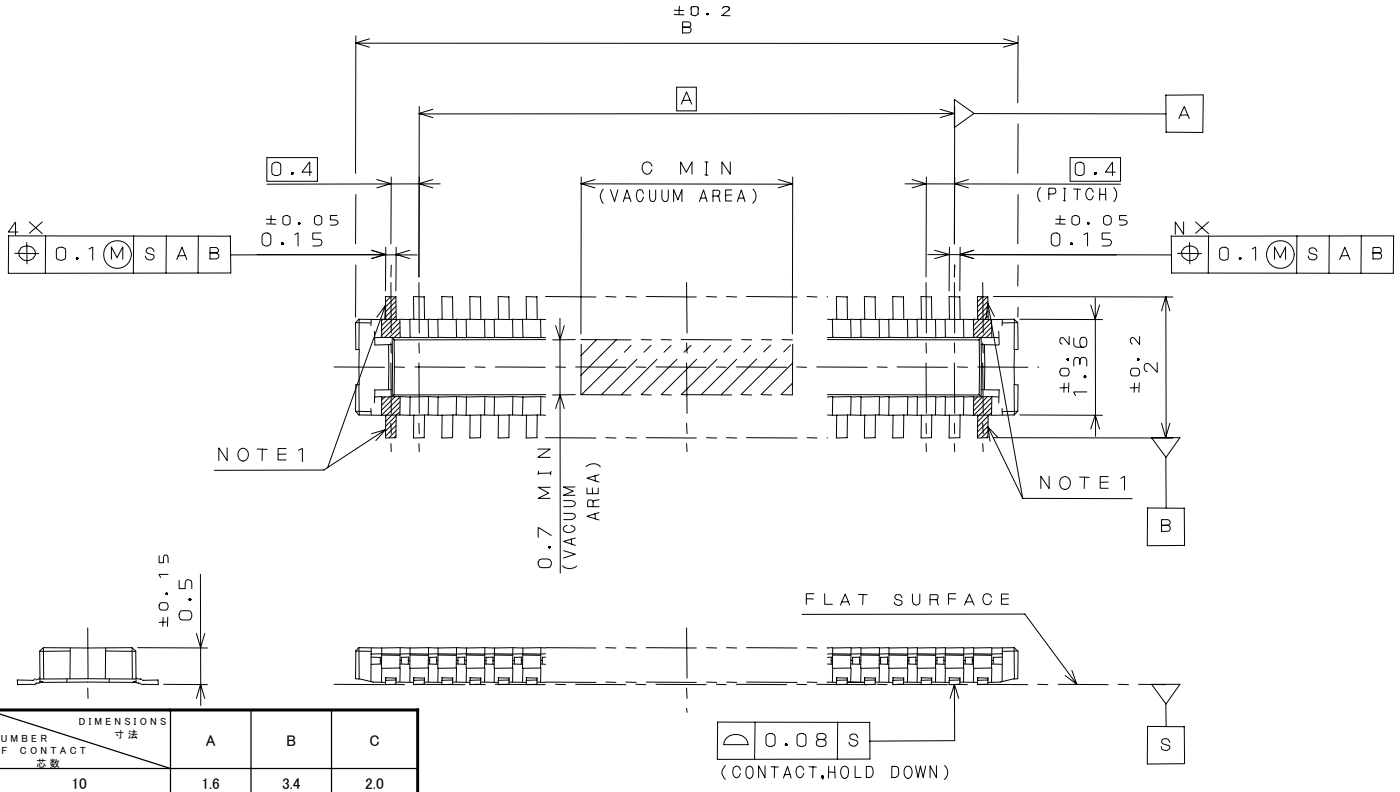
WP7 * - S *** V A * - R****

- Series
- Modification Code
- Contact Shape S: Receptacle
- No. of Contacts
- Connection Type V: Stacking
- Finish A: Au plating
- Modification Code
  1: Standard Product
  E: Inspection Jig Product
- Reel Part Number (Note 1)
  (R6000: For Standard Product)
  (R300: For Inspection Jig Product)

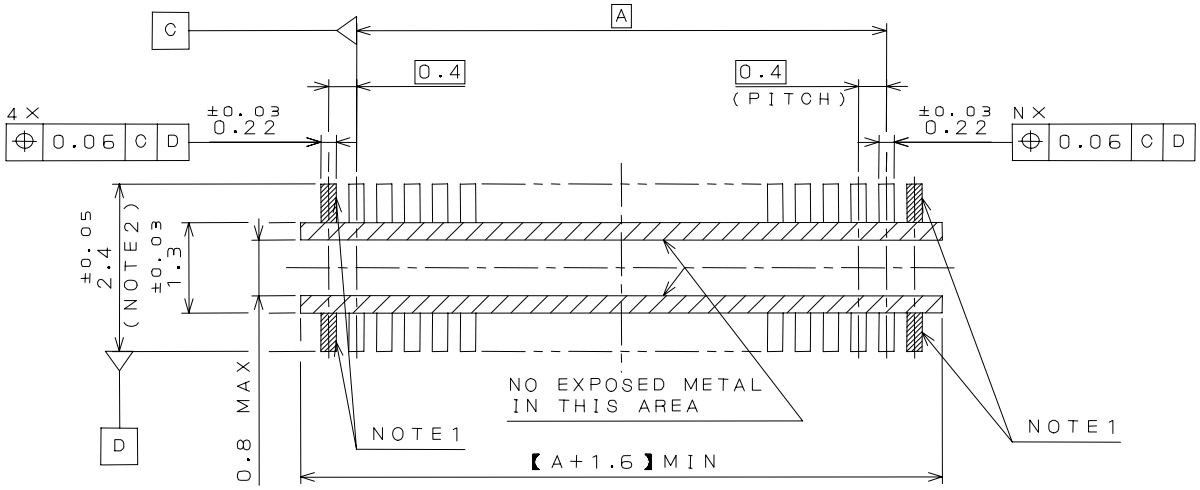
Note 1) An embossed tape reel contains 6,000 pieces of standard product, or 300 pieces of inspection jig product.
Please contact us for details on embossed tape specifications.

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

WP7A Plug



DIMENSIONS 寸法 / NUMBER OF CONTACT 芯数	A	B	C
10	1.6	3.4	2.0
16	2.8	4.6	2.0
20	3.6	5.4	2.0
26	4.8	6.6	5.0
30	5.6	7.4	5.0
42	8.0	9.8	5.0



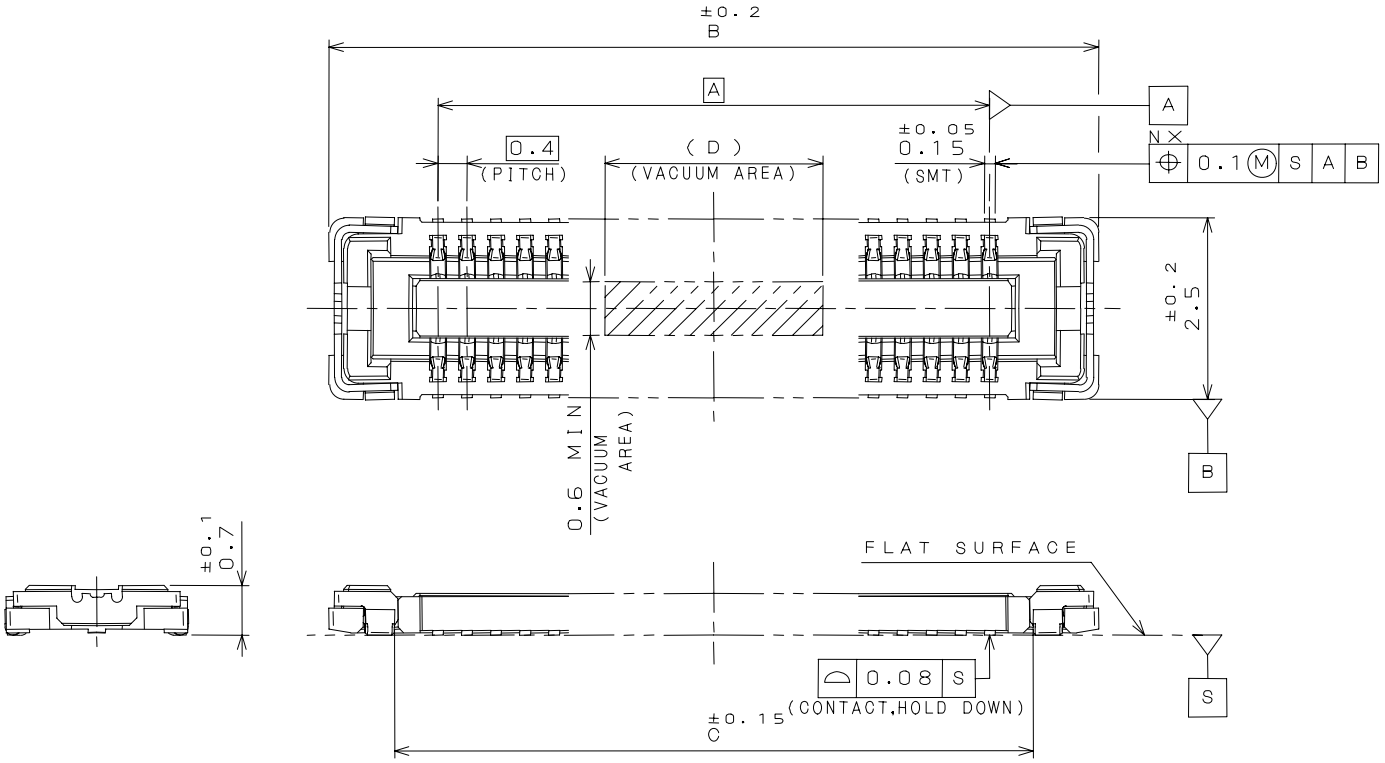
APPLICABLE P.C.B. DIMENSION(REF.)
適合基板寸法(参考)

Note 1) Four corners are hold-downs. (Cannot be used for electrical connection.)
ex. Connector with 20(N) pos. will have same amount of SMT terminals as 24(N+4) pos.

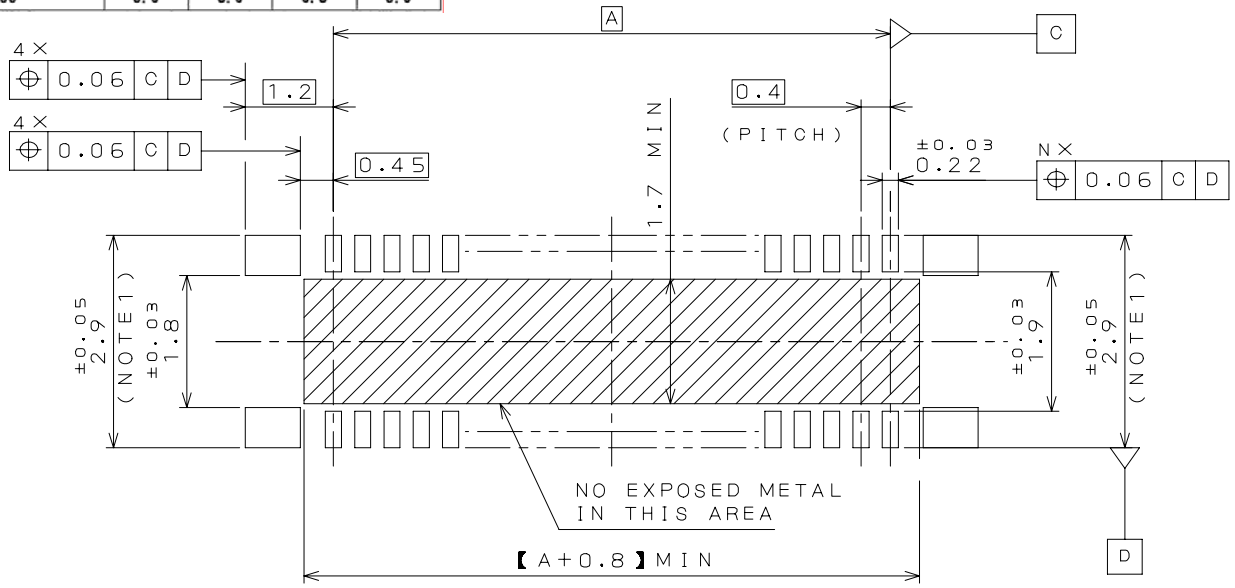
Note 2) Dimension 3±0.05 is recommended in case repair is needed.

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

WP7A Receptacle



DIMENSIONS 寸法 / NOMBER OF CONTACT 芯数	A	B	C	D
10	1.6	4.6	2.8	2.0
26	4.8	7.8	6.0	5.0
30	5.6	8.6	6.8	5.0

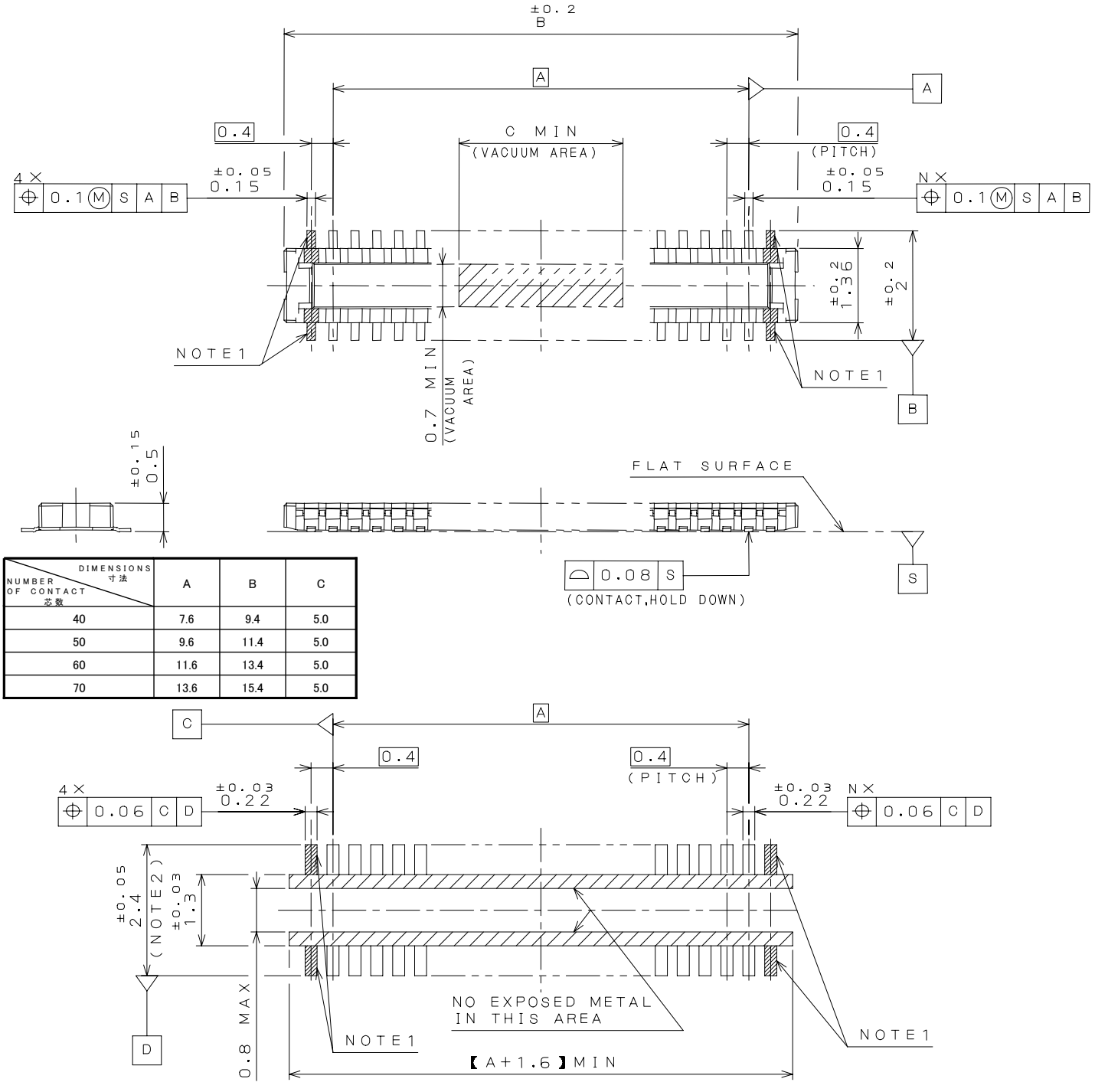


APPLICABLE P.C.B. DIMENSION(REF.)
適合基板寸法(参考)

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

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

WP7B Plug



DIMENSIONS 寸法 / NUMBER OF CONTACT 芯数	A	B	C
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

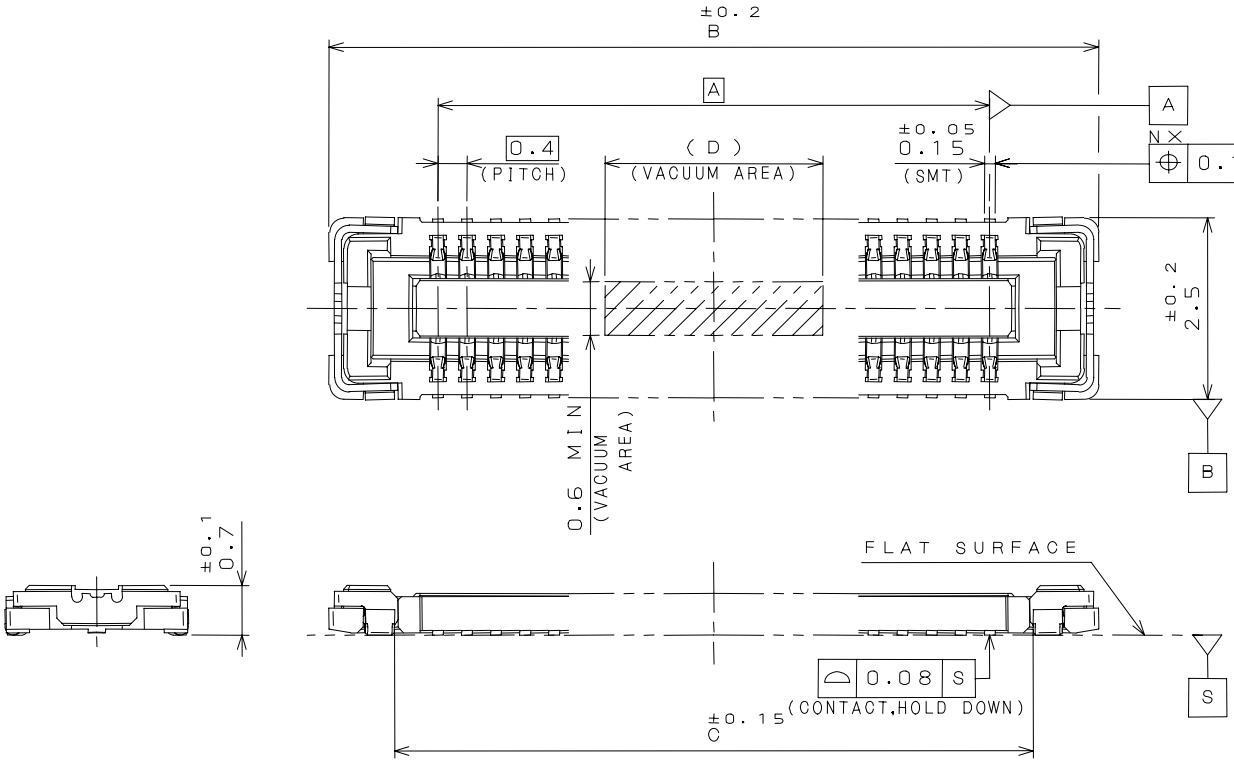
APPLICABLE P.C.B. DIMENSION(REF.)
適合基板寸法(参考)

Note 1) Four corners are hold-downs. (Cannot be used for electrical connection.)
ex. Connector with 20(N) pos. will have same amount of SMT terminals as 24(N+4) pos.

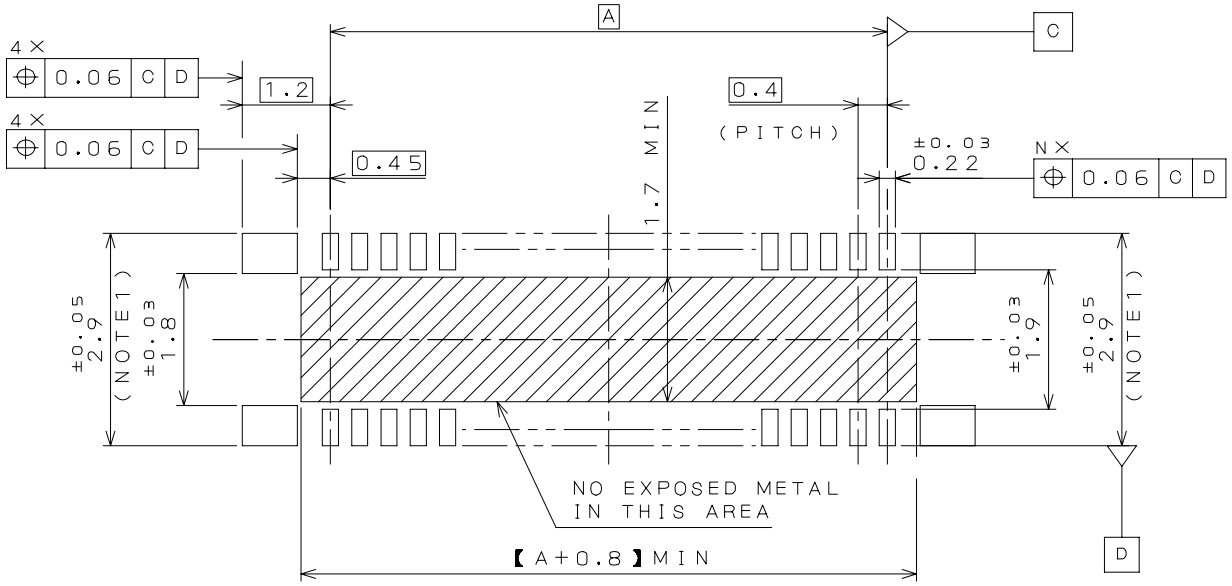
Note 2) Dimension 3±0.05 is recommended in case repair is needed.

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

WP7B Receptacle



DIMENSIONS 寸法 / NUMBER OF CONTACT 芯数	A	B	C	D
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



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

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

Product Line-up

Type	Plug PN (Drawing)	Receptacle PN (Drawing)	No.of Contacts
WP7A	WP7-P***VA1 (SJ111875)	WP7A-S***VA1 (SJ111877)	10~30 pos.
WP7B	WP7B-P***VA1 (SJ111879)	WP7B-S***VA1 (SJ111881)	40~70 pos.

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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.