

**NEW**



0.4mm Pitch Stacking Type Board to Board Connector

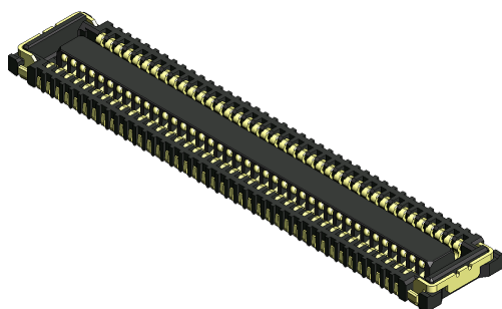
CONNECTOR

MB-0109-3

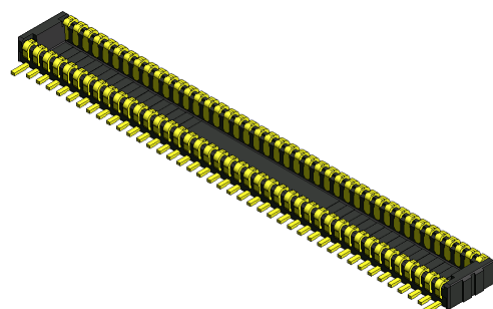
July 2007

## AA03 Series

**RoHS Compliant**



Receptacle



Pin

### Outline

The AA03 Series connectors are 0.4mm-pitch, stacking type, board-to-board connectors ideal for slim low-profiled information communication devices such as mobile phones, LCDs and PDAs, with high density mounting requirements.

### Features

- \* 0.4mm pitch; double lines; 20 to 80 positions; stacking height: 1.0mm
- \* Separate 2-point contact design to resist twisting stress.
- \* Contact structure with high abrasion resistance and roll contacts with contact reliability.
- \* Secure hold-down prevents insulator breakage or lift-off from FPC (receptacle side).
- \* Nickel barrier on contact of the plug and receptacle prevents solder migration
- \* Pb-free
- \* Connectors for inspection jigs are provided for both plug and receptacle (Note 1)

### General Specifications

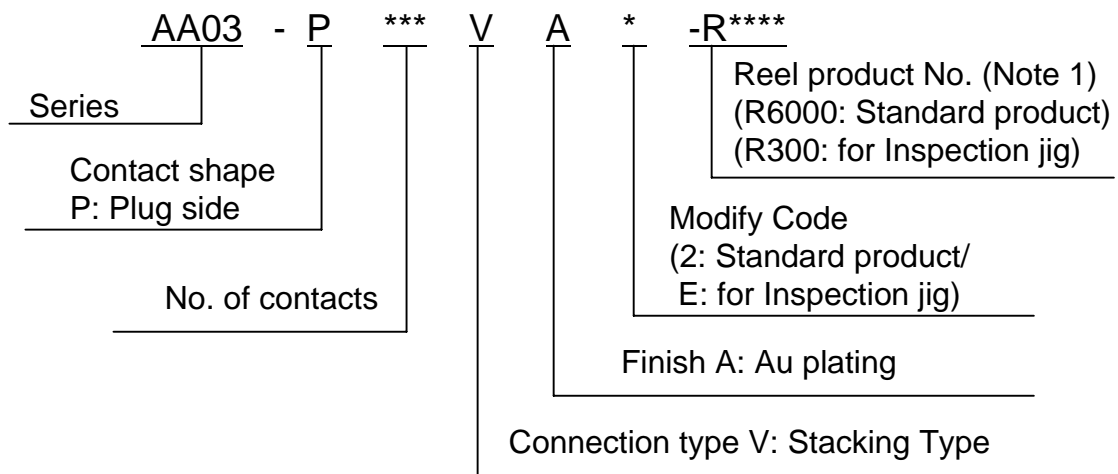
- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>■ No. of contacts :<br/>20, 22, 24, 30, 36, 40, 50, 64, 70, 80 pos.</li> <li>■ Pitch: 0.4mm, 2 rows</li> <li>■ Operating temperature:<br/>-45 Deg. C to +85 Deg. C</li> <li>■ Contact resistance:<br/>70m ohm max. (initial)</li> <li>■ Lifetime: 50 times</li> </ul> | <ul style="list-style-type: none"> <li>■ Rated current: AC, DC 0.4A/per pos.</li> <li>■ Rated voltage: AC, DC 50V</li> <li>■ Insulation resistance: 100M ohm min. (initial)</li> <li>■ Dielectric withstanding voltage:<br/>AC250Vr.m.s per minute</li> <li>■ Total insertion force:<br/>1N x n max.(n: pos.)</li> <li>■ Total withdrawal force:<br/>0.15Nx n min. (n: pos.)</li> </ul> |
|--|---|

(Note 1) Please contact us for connector used for inspection jigs.

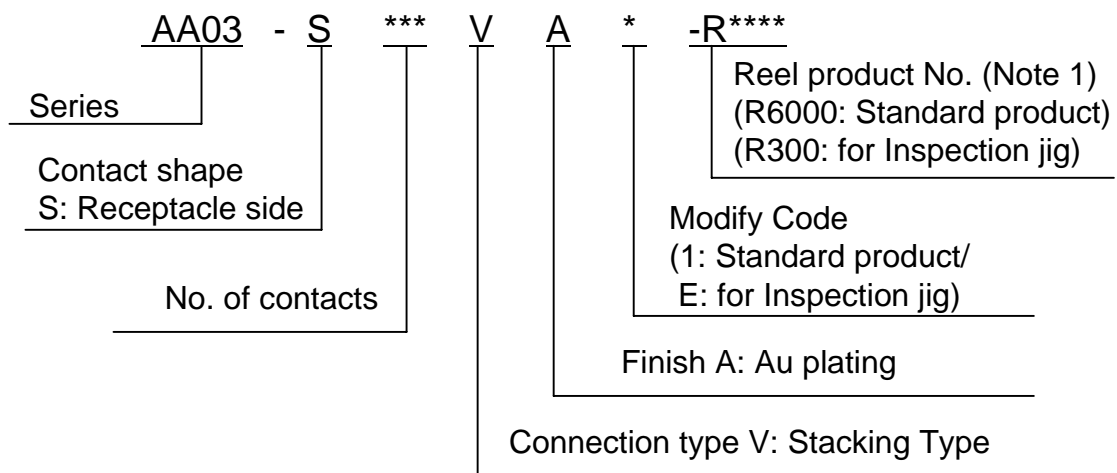
Materials and Finishes

Components	Materials/Finishes
Contact	Copper alloy/ Au plating( 0.1um min.)
Insulator	Heat resistant plastic (UL94V-0, Color: Black)
Hold-down	Plug: Copper alloy/ Au plating(0.1 um min.) Receptacle: Copper alloy/ Sn plating

Ordering Information



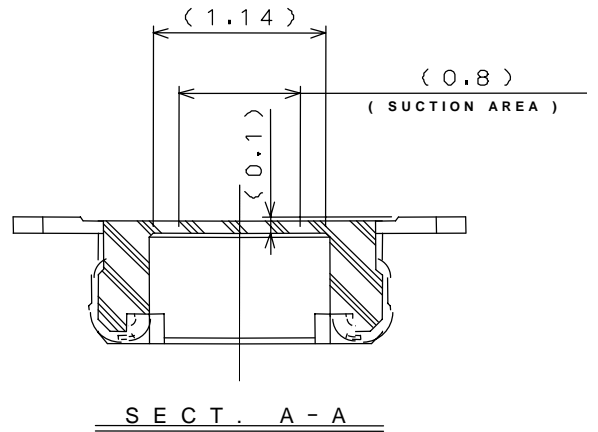
Ordering Information



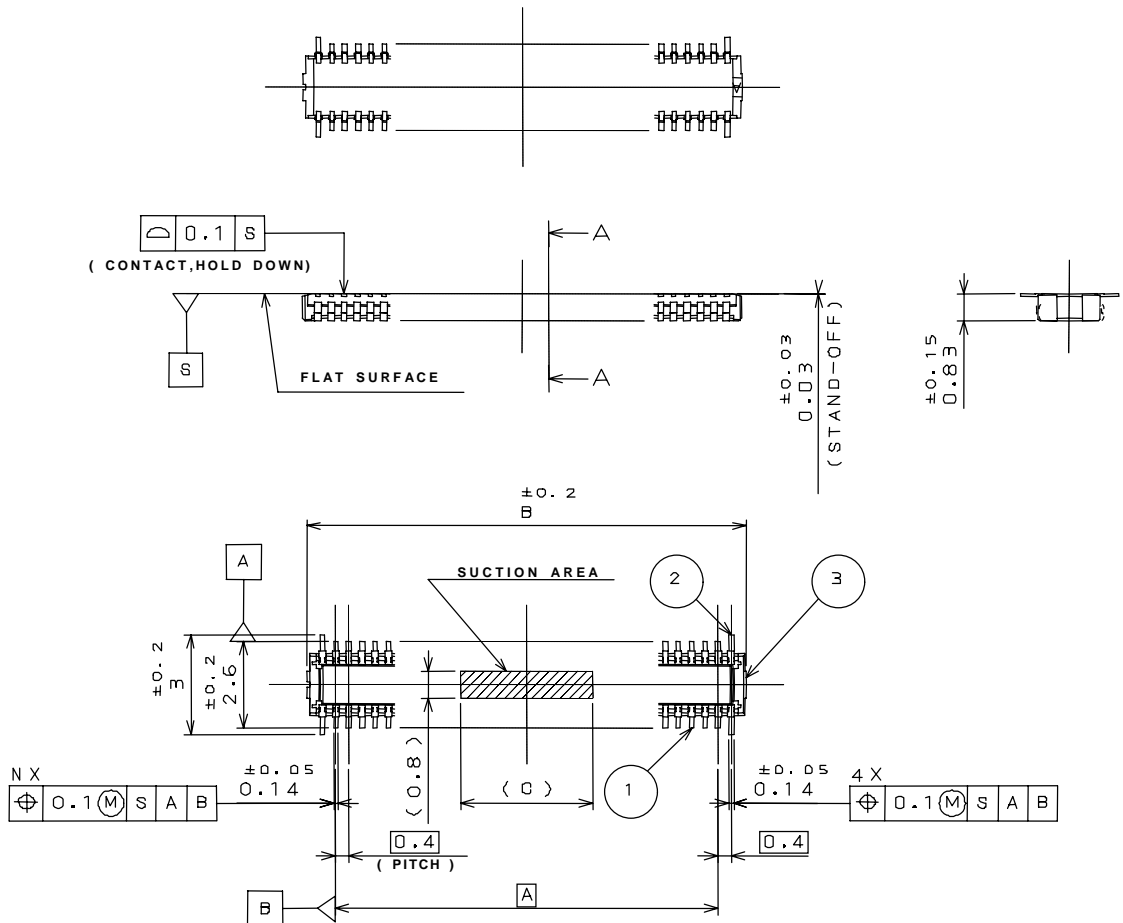
(Note 1) Both standard products (6,000 pcs./reel) and those for inspection jig (300 pcs./reel) are supplied on emboss tape.

For information on emboss taping specifications, please contact us directly.

<b>Part Number</b>	<b>AA03-P***VA2</b>
<b>SJ Drawing</b>	<b>SJ101604</b>



SECT. A - A



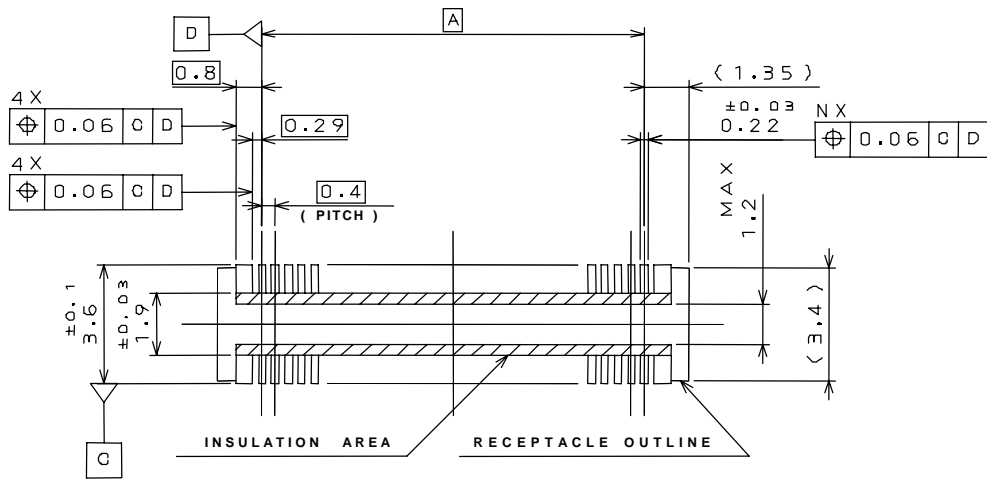
No. of contacts	A	B	C
20	3.6	5.3	2.0
22	4.0	5.7	2.0
24	4.4	6.1	2.0
30	5.6	7.3	2.0
36	6.8	8.5	2.0
40	7.6	9.3	2.0
50	9.6	11.3	2.0
64	12.4	14.1	4.0
70	13.6	15.3	4.0
80	15.6	17.3	4.0

Note 1) Coplanarity 0.1 mm max.

Note 2) An embossed tape reel contains 6000 pieces.

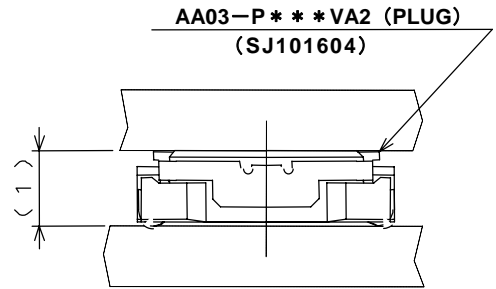
Please contact us for details of embossed tape specifications

<b>Part Number</b>	<b>AA03-P***VA2</b>
<b>SJ Drawing</b>	<b>SJ101604</b>



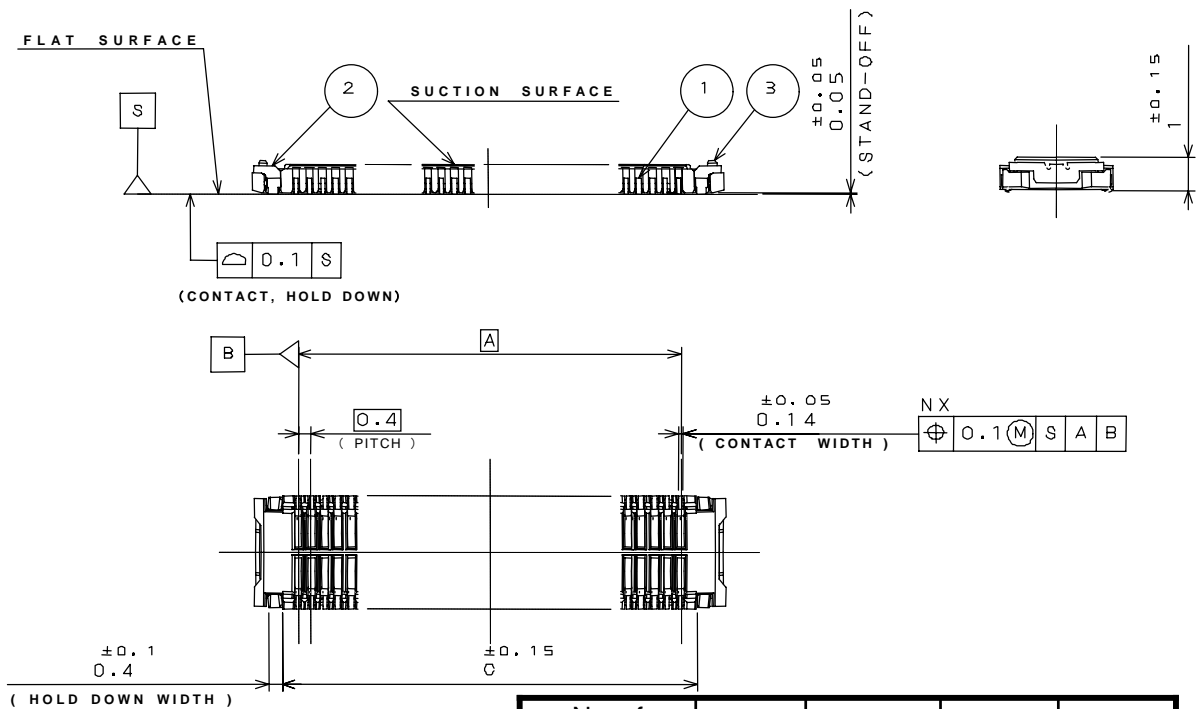
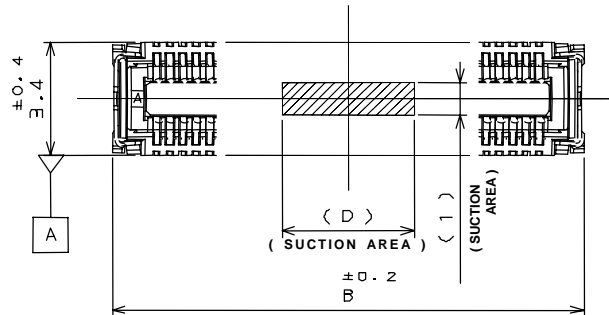
Applicable dimension of board  
(for reference)

<b>Part Number</b>	<b>AA03-S***VA1</b>
<b>SJ Drawing</b>	<b>SJ037492</b>



**MATED CONDITION (REF.)**

嵌合状態図(参考)



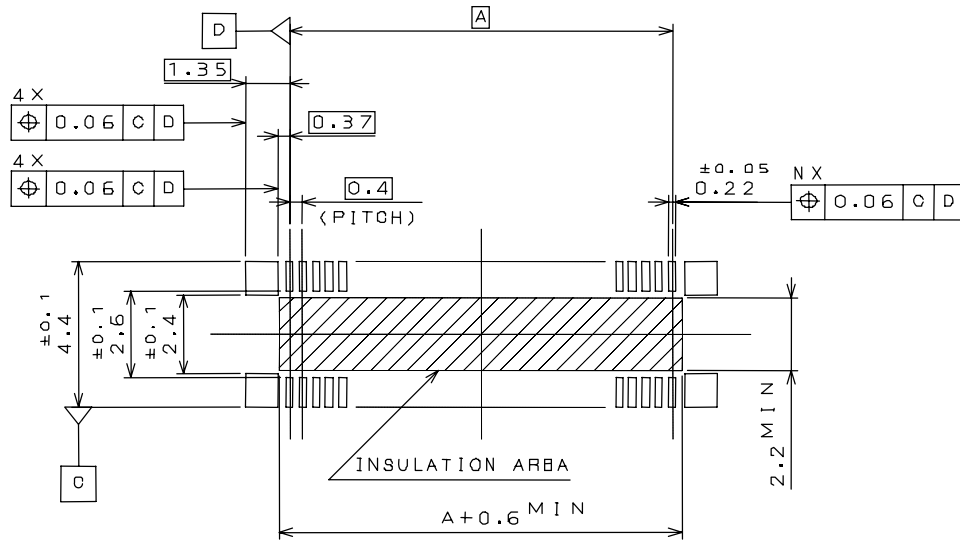
No. of contacts	A	B	C	D
20	3.6	6.3	4.6	2.0
22	4.0	6.7	5.0	2.0
24	4.4	7.1	5.4	2.0
30	5.6	8.3	6.6	2.0
36	6.8	9.5	7.8	2.0
40	7.6	10.3	8.6	2.0
50	9.6	12.3	10.6	2.0
64	12.4	15.1	13.4	4.0
70	13.6	16.3	14.6	4.0
80	15.6	18.3	16.6	4.0

Note 1) Coplanarity 0.1 mm max.

Note 2) An embossed tape reel contains  
6000 pieces.

Please contact us for details of embossed tape specifications

<b>Part Number</b>	<b>AA03-S***VA1</b>
<b>SJ Drawing</b>	<b>SJ037492</b>



Applicable dimension of board  
(for reference)

Specifications	Products	No.
Product Drawing	(Standard product) Plug	SJ101604
	(Standard product) Receptacle	SJ037492
	(For Inspection jig) Plug	SJ100167
	(For Inspection jig) Receptacle	SJ100169
	(Applicable board via Configuration example) Plug side	SJ100541
	(Applicable board via Configuration example) Receptacle side	SJ038323
Product Specifications		JACS-1740-8
Handling Information		JAHL-1740
Evaluation Test Report		SR-C-0631

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**Notice:** Products shown in this leaflet 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.