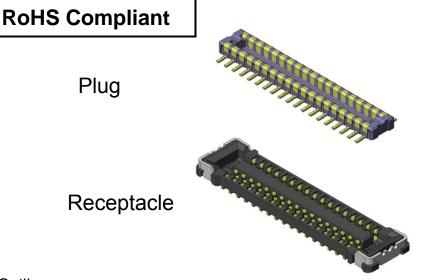




0.35mm Pitch, Stacking Type Board-to-Board (FPC) Connector CONNECTOR

MB-0288-1 March 2015

WP21 Series



Outline

The WP21 Series is a space-saving low-profile stacking type board-to-board (FPC) connector with 0.35mm pitch spacing that is ideal for high-density mounting in slim and compact information communication devices like mobile phones, and smartphones.

The WP21 achieves to minimize more than 10% mounting space compared to our existing product (WP9 Series) and contributes to save board space and also enhances design flexibility for customers.

Features

- 0.35mm pitch, 2 rows, 0.6mm stacking height.
- 2-point contact design to resist twisting stress.
- Improved workability for customers with a clear click feeling.
- Contact structure ensures high wear-resistance and high contact reliability.
- Pb-free. (Ni barrier on contact prevents solder wicking.)

General Specifications

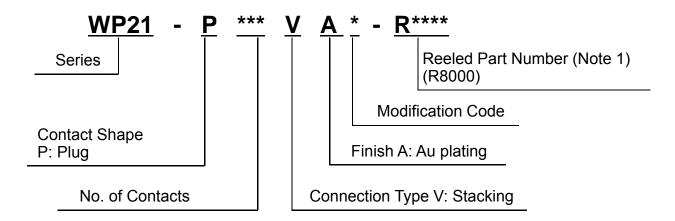
- ■No. of Contacts: 10, 20, 22, 24, 30, 34, 40, 42,
 - 46, 54 pos.
- ■Pitch: 0.35mm, 2 rows
- ■Operating Temperature: -40 Deg. C to +85 Deg. C
- ■Contact Resistance: $70m\Omega$ max (initial)
- ■Life Time: 30 mating cycles

- ■Rated Current:
 - AC, DC 0.3A each per terminal
- ■Rated Voltage: AC, DC 50V
- ■Insulation Resistance: 100M Ω 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:
 - 0.15N x n min. (n: No. of pos.)

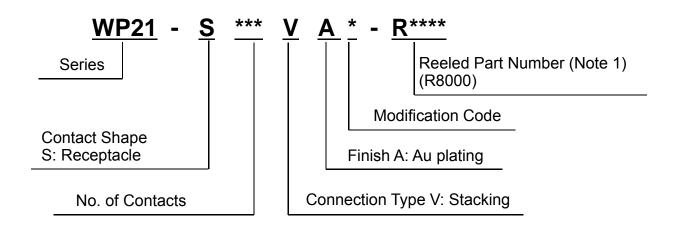
Materials and Finishes

Component	Material and Finish	
Contact	(Contact Area) Cu alloy / Au plating (0.1µm min.) (Mounting Area) Cu alloy / Au plating (0.05µm min.)	
Insulator	Heat-resistant Plastic	
Hold-down	Plug Side: Cu alloy / Au plating (0.05µm min.)	
Holu-uowii	Receptacle Side: Cu alloy / Sn plating	

Ordering Information (Plug)



Ordering Information (Receptacle)

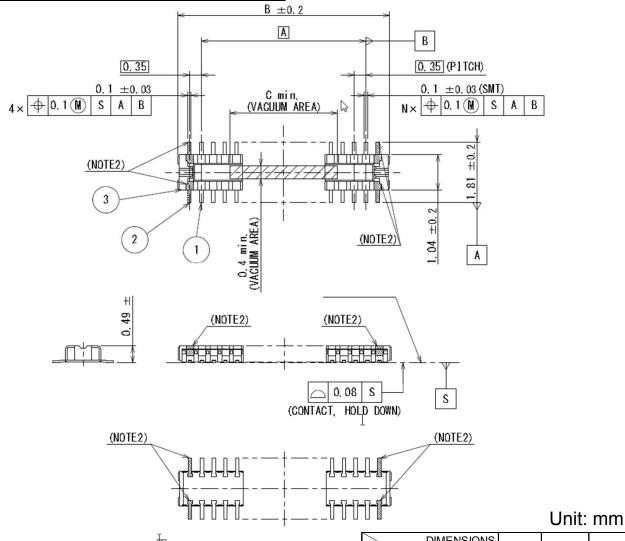


Note 1) An embossed tape reel contains 8,000 pieces.

Please contact us for details on embossed tape specifications.

Part Number	WP21-P***VA1	
SJ Drawing	SJ114695	

WP21 Plug



		1
D -	Ā	->
0. 35	> →	0.35 (P1TCH)
0. 17 ±0.02 4× 0.06 C D	-	0. 17 ±0. 02 N× 0. 06 C D
2. 2 ±0.02 (NOTE1) 1. 12 ±0.02 0. 52 max.	(NOTE2) NO EXPOSED ME IN THIS AREA [A+1, 2] min.	(NOTE2)
į	APPLICABLE P.C.B. DIMENSION 適合基板寸法(参考)	(REF.)

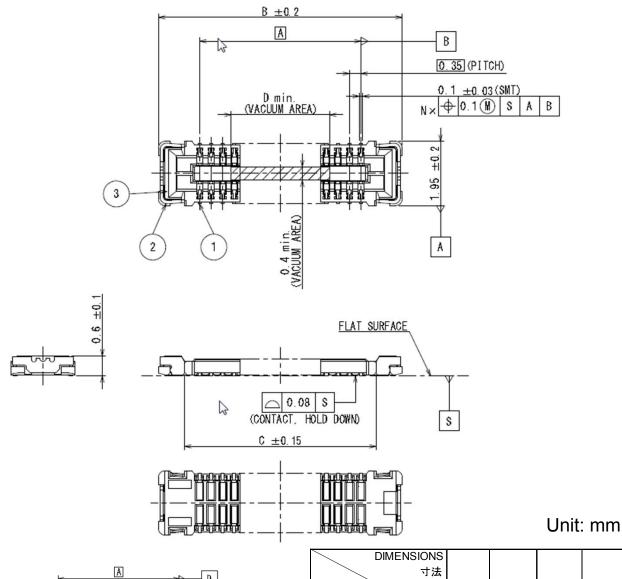
		OTTIC.	
DIMENSIONS 寸法 NUMBER OF CONTACT 芯数	Α	В	С
10	2.10	2.81	1.0
20	3.15	4.56	2.0
22	3.50	4.91	2.0
24	3.85	5.26	2.0
30	4.90	6.31	5.0
34	5.60	7.01	5.0
40	6.65	8.06	5.0
42	7.00	8.41	5.0
46	7.70	9.11	5.0
54	9.10	10.51	5.0

Note 1) Dimension 2.8 \pm 0.02 is recommended in case repair is needed.

Note 2) Four corners are hold-downs. (Cannot be used for electrical connection.) ex. Connector with 42 (x) pos. will have 46 (x+4) pos. of SMT terminals.

Part Number	WP21-S***VA1	
SJ Drawing	SJ114693	

WP21 Receptacle



	-	A >	D
4× + 0.06 C D	0.905	> <	0.35 (PITCH)
4× 0.06 C D	0.425	6. In In I	0.17 ±0.02 N× 0.06 C D
2.2 ±0.02 (NOTE1)	NC IA+	EXPOSED METAL ITHIS AREA	1. 32 ±0.02 2. 2 ±0.02 (NOTE1)
	APPLICABLE P.C.E 適合基板	B. DIMENSION (RE (可法(参考)	<u>F.)</u>

DIMENSIONS 寸法 NUMBER OF CONTACT 芯数	Α	В	С	D
10	2.10	3.90	2.31	1.0
20	3.15	5.65	4.06	2.0
22	3.50	6.00	4.41	2.0
24	3.85	6.35	4.76	2.0
30	4.90	7.40	5.81	5.0
34	5.60	8.10	6.51	5.0
40	6.65	9.15	7.56	5.0
42	7.00	9.50	7.91	5.0
46	7.70	10.20	8.61	5.0
54	9.10	11.60	10.01	5.0

Note 1) Dimension 2.8 \pm 0.02 is recommended in case repair is needed.

Product Drawings and Specifications

Series	WP21
SJ Drawing (Plug)	Individual Product: SJ114695 Reeled Product: SJ114696
SJ Drawing (Receptacle)	Individual Product: SJ114693 Reeled Product: SJ114694
Specifications	JACS-11021
Handling Instructions	JAHL-11021
Summary Report	SR-C-1329

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:

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc

Japan Aviation Electronics Industry, Limited

Product Marketing Division

Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539

Phone: +81-3-3780-2882 FAX: +81-3-3780-2946

^{*} The specifications in this brochure are subject to change without notice. Please contact JAE for information.