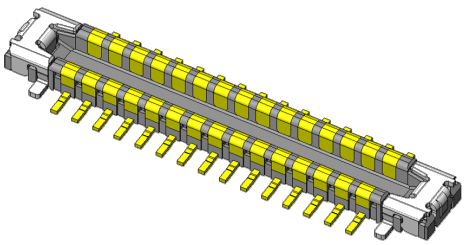
0.35mm Pitch Stacking Type Board-to-board (FPC) Connector CONNECTOR

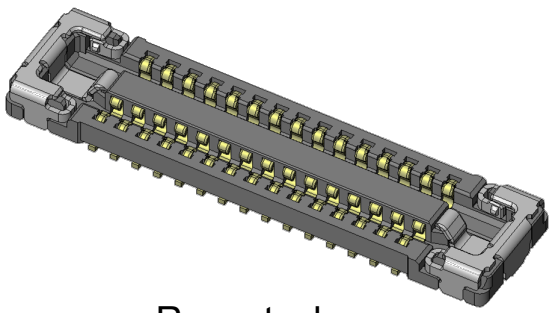
WP26DK Series

MB-0356-2
Sep.2021

RoHS Compliant



Plug



Receptacle

With the spread of new technologies such as 5G, mounting density of parts is increasing inside of small mobile devices such as smartphones, wearable devices, and tablet PCs. There are also trends for improving on existing features including increasing battery size and adding more sensors such as cameras. For this reason, it is a prerequisite that connectors used inside these devices are smaller, but they must also support higher current and improved mechanical strength.
The WP26DK Series is a robust 0.35 mm pitch stacking type board-to board connector to cater to these needs.
This product has greatly improved strength and reliability by equipping hold-downs with protective metal fittings on the vulnerable internal surfaces of the insulator as well as the top mating surfaces. The additional protection is critical for preventing damage to the connector if they are initially misaligned during the mating process. Furthermore, there is a reduction in the total number of terminals required by using the 2 hold-downs as power supply terminals that can handle up to 3A each. This allows for miniaturization of devices by saving board-mounting space, and contributes to the design flexibility for engineers.

Applicable Market

Mobile phones, smartphones, wearable devices, tablet PCs, notebook PCs, digital cameras, VR/AR headsets and other small portable devices

Features

- 0.35mm pitch, 2 rows, 0.6mm stacking height, 1.9mm width
- Two hold-downs for power supply, supporting transmission of 3.0A
- Hold-down structure adds protection to the mating surface to prevent damage to the insulator (Armored)
- Robust design with metal fitting to prevent damage to the internal insulator surfaces during mating
- Improved workability for customers with a clear click feeling.
- Highly reliable 2-point contact structure
- Nickel barrier on contact prevents solder wicking
- Supports MIPI, USB3.1 Gen2, and PCIe Gen3 transmission.

General Specifications

Number of Contacts	10, 16, 24,30, 34, 40, 48, 50, 60 positions (+2 power)
Pitch	0.35mm, 2 rows
Contact Resistance	Signal Terminal: 70mΩ max. (initial) Power Supply Terminal: 20mΩ max. (initial)
Dielectric Withstanding Voltage	AC250V rms. for 1 minute
Insulation Resistance	100MΩ min. (initial)
Durability	30 mating cycles
Operating Temperature Range	-40℃ ~ +85℃
Rated Current	Signal Terminal: AC, DC 0.3A per pos. Power Supply Terminal: AC, DC 3.0A per pos.
Rated Voltage	AC, DC 50 V
Total Insertion Force	1.5N x (n+4) max. (n: No. of pos.)
Total Extraction Force	0.15N x (n) min. (n: No. of pos.)

Materials and Finishes

Components	Materials	Finishes
Contact	Copper alloy	Au plating (contact area) Au plating (mounting area)
Insulator	Heat resistant plastic	
Hold-down	Copper alloy	Au plating (contact area) Au plating (mounting area)

Ordering Information (Plug)

WP26DK - P * V A * - R ****

- WP26DK: Series: WP26DK
- P: Contact Shape, P: Plug
- ***: Number of Contacts: in three digits (***)
- V: Connection Type V: Stacking
- A: Finish A: Au plating
- *: Modification Code
- R ****: Reeled Part Number (Note1) (R15000)

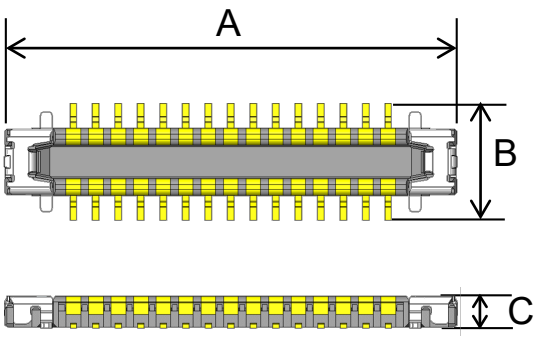
Ordering Information (Receptacle)

WP26DK - S * V A * - R ****

- WP26DK: Series: WP26DK
- S: Contact Shape, S: Receptacle
- ***: Number of Contacts: in three digits (***)
- V: Connection Type V: Stacking
- A: Finish A: Au plating
- *: Modification Code
- R ****: Reeled Part Number (Note1) (R15000)

Note 1) An embossed tape reel contains 15,000 pieces
Please contact us for details on embossed tape specifications.

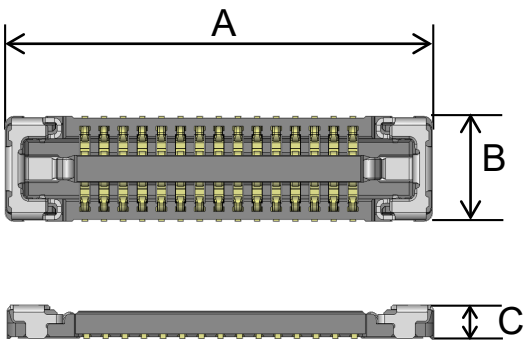
Outer Dimensions (Plug)



Unit: mm

Number of Contacts \ Dimensions	A	B	C
10	3.55	1.81	0.49
16	4.60	1.81	0.49
24	6.00	1.81	0.49
30	7.05	1.81	0.49
34	7.75	1.81	0.49
40	8.80	1.81	0.49
48	10.20	1.81	0.49
50	10.55	1.81	0.49
60	12.30	1.81	0.49

Outer Dimensions (Receptacle)



Unit: mm

Number of Contacts \ Dimensions	A	B	C
10	4.30	1.90	0.60
16	5.35	1.90	0.60
24	6.75	1.90	0.60
30	7.80	1.90	0.60
34	8.50	1.90	0.60
40	9.55	1.90	0.60
48	10.95	1.90	0.60
50	11.30	1.90	0.60
60	13.05	1.90	0.60

Product Drawings and Specifications

Part Number	Drawing Number	Specifications	Handling Instructions
WP26DK-P******-R15000 (Plug side)	SJ121275 (Individual Product)	JACS-11277	JAHL-11277
	SJ121276 (Reeled Product)		
WP26DK-S******-R15000 (Receptacle side)	SJ121277 (Individual Product)		
	SJ121278 (Reeled Product)		

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

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