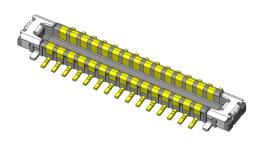


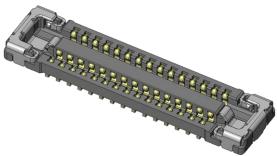
## 0.35mm Pitch Stacking Type Board-to-board (FPC) Connector CONNECTOR

# **WP26DK Series**

MB-0356-4 Feb.2025

## **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.

In addition, due to the progress of electrification (EV) and higher functionality of automobiles, the layout of automobile interiors is becoming more modular like that of PCs and other consumer electronics. To meet this demand, the WP26DK series was evaluated for automotive specifications such as 125 deg. C high-temperature compatibility. \* The WP26DK series is a stacking type board-to-board (FPC) connector with 0.35mm pitch and power supply terminals with robust construction.

This product is equipped with protective metal fittings that are integrated into the hold downs, which greatly improves the robustness of the product. In addition, by using hold-downs as power supply terminals, the total number of terminals can be reduced to achieve a smaller size, contributing to greater design freedom for customers by saving board mounting area.

\*Not compatible with IATF

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 up to 5.0A
- 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, USB4®, PCIe Gen4 transmission Note) USB4® are trademarks of USB Implementers Forum, Inc.

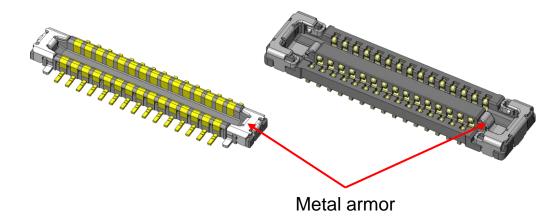
# General Specifications

Number of Contacts	10, 16, 24,30, 34, 40, 48, 50, 60 positions (+2 power)		
Pitch	0.35mm, 2 rows		
Contact Resistance	Signal Terminal: $50m\Omega$ max. (initial) Power Supply Terminal: $20m\Omega$ max. (initial)		
Dielectric Withstanding Voltage	AC250Vr.m.s. (per minute)		
Insulation Resistance	100MΩ min. (initial)		
Durability	30 mating cycles		
Operating Temperature Range	-40 deg. C to +85 deg. C (General Item) -40 deg. C to +125 deg. C (Automotive spec tested)		
Rated Current	Signal Terminal: AC, DC 0.3A per pos. Power Supply Terminal: AC, DC Up to 5.0A 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.)		

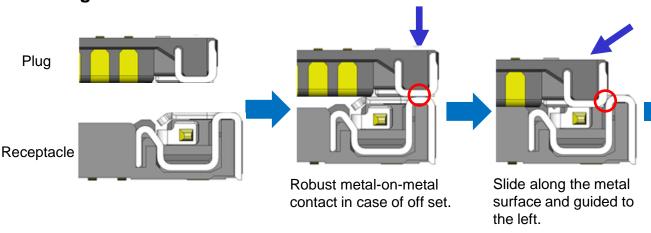
## Materials and Finishes

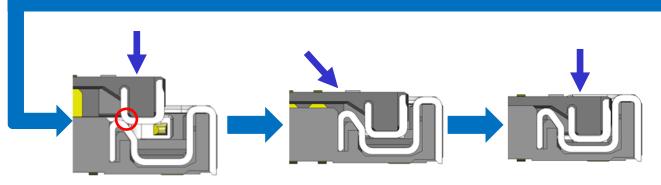
Components	Materials	Finishes	
Contact	Copper alloy	Au/Ni plating (Contact area) Au/Ni plating (Mounting area)	
Insulator	Heat resistant plastic	_	
Hold-down	Copper alloy	Au/Ni plating (Contact area) Au/Ni plating (Mounting area)	

### **Metal Armor**



## **Mating Process**





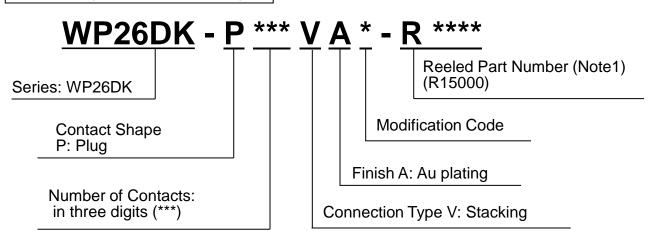
Going too far to the left, metal-to-metal contact on the inside wall.

Guided by the metal armor toward proper alignment.

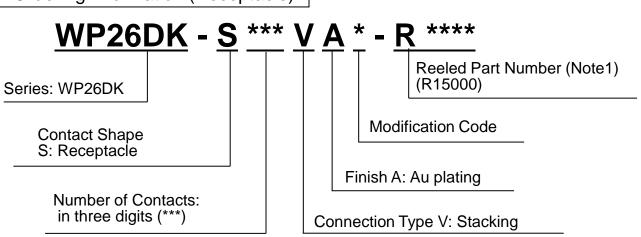
Connectors are aligned and fully mated.

★ Alignment with metal armor to prevent breakage of plastic parts

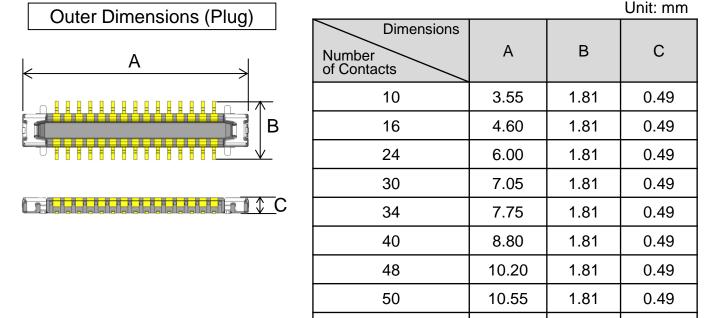
## Ordering Information (Plug)



Ordering Information (Receptacle)



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



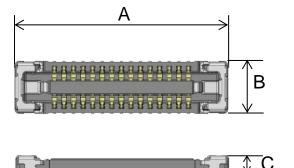
60

12.30

1.81

0.49

### Outer Dimensions (Receptacle)



	Unit: mm		
Dimensions Number of Contacts	А	В	O
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***VA3-R15000 (Plug side)	SJ121275 (Individual Product)	JACS-11277 (General Item) JACS-11426 (Automotive spec tested product)	JAHL-11277 (General Item) JAHL-11426 (Automotive spec tested product)
	SJ121276 (Reeled Product)		
WP26DK-S***VA3-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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