

# WP26DK Series Robust Board to Board Connector

**Board to Board(FPC) Connector, 0.6mm Mating height, 5A Power, 0.35mm Pitch, Automotive Specification Evaluations Connector**

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The WP26DK series epitomizes state-of-the-art innovation in Board to Board Connector technology, catering to the burgeoning needs for higher density and efficiency in small mobile devices such as smartphones, wearable devices, and tablet PCs, all against the backdrop of the 5G revolution. At a mere 0.35mm pitch, these connectors are not only space savers, but their robust construction supports higher current and mechanical strength – a necessity with the advent of larger batteries and an increased number of sensors like cameras.

As vehicles edge closer to full electrification and interiors morph into modular designs akin to PCs and other consumer electronics, the demand for Board to Board(FPC) Connectors that enable seamless electrical connections between modules is spiking. The WP26DK series rises to this challenge with aplomb, offering connector solutions that support high-speed transmission and high pin counts without compromising on size.

Integrated protective metal fittings within the connectors' hold-downs bolster product robustness, promising enduring performance even in the harshest operating environments that align with automotive specification evaluations. This innovative design allows for a reduction in terminal count while simultaneously offering a smaller connector footprint, thus freeing up precious board real estate – a feature of immense value to designers focused on maximizing functionality within tight spaces.

In a world where devices are expected to handle increasing amounts of data at breakneck speeds, the WP26DK Board to Board Connector series stands as a testament to Japan Aviation Electronics Industry, Ltd's commitment to quality, innovation, and the foresight to meet the needs of both today and tomorrow's electronics landscape.

## Features

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- Board to Board(FPC) Connector with 0.35mm pitch, two rows for compactness
- Stacking height of just 0.6mm and a minimal width of 1.9mm
- Dual purpose hold-downs designed for a 5.0A power supply to support heightened current needs
- Armored hold-down structure that shields the mating surface, enhancing insulator durability
- Metal fitting integrated within the connector for robustness, protecting internal surfaces during connection
- Tactile click feeling for improved workability and customer satisfaction when using the connector
- Highly reliable 2-point contact structure within the Board to Board Connector for consistent performance
- Nickel barrier application on contacts aids in the prevention of solder wicking
- Automotive Specification Evaluations
- Ability to support high-speed transmissions such as MIPI, USB4®, and PCIe Gen4, making it ideal for cutting-edge applications

USB4® is a trademark of the USB Implementers Forum, Inc., ensuring compliance with industry standards

# Applications

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

- \* Please contact us for automotive spec tested specifications.
- \* This product is not IATF certified.

## General Specifications

Number of Contacts	10, 16, 24, 30, 34, 40, 48, 50, 60 positions (+2 power)
Pitch	0.35 mm
Rated Current	Signal Terminal: AC, DC 0.3A per pos. Power Supply Terminal: AC, DC 5.0A per pos.
Rated Voltage	AC, DC 50 V
Contact Resistance	Signal Terminal: 50mΩ max. (initial) Power Supply Terminal: 20mΩ max. (initial)
Insulation Resistance	100 megohm min. (initial)
Dielectric Withstanding Voltage	AC 250 Vr.m.s. 1 minute
Mated Height	0.6 mm
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.)
Durability Mating Cycles	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)

1. The values specified in this web site 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 web site 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:

- \* 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 evention equipment, etc.

- \* 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