

WP66DK Series (0.35mm pitch Smallest Stacking Type Connector)

0.35mm Pitch Stacking Type Board-to-board (FPC) Connector with Power Supply Terminals



Recently, compact and high-function wearable devices such as smartwatches and smart glasses are becoming more popular. These devices must use boards that are smaller than those found in smartphones, so even smaller connectors must also be used. In addition to miniaturization of the connectors, implementing a robust structure to prevent damage during mating is critical. This product adopts our standard multifunction hold-down structure which allows them to be used as a power supply terminal to reduce total pin count, as well as maintaining strong board retention with enhanced soldering surface area. The hold-downs also incorporate protective metal fittings on the mating and internal surfaces of the insulator for ultimate strength and reliability. In addition to achieving miniaturization and robustness, this series offers low pin count variations under 10 positions, contributing to design flexibility for engineers.

[Catalog](#) [Specifications](#) [Handling Instructions](#) [Test Report](#) [Product Information Modules](#) [Applicable Tools](#) [Product Videos](#) [Product Samples](#) [Stock Search](#) [PDF Download](#) 

Features

- 0.35mm pitch, 1.6mm width, 2 rows, 0.6mm mated height
- 2 power supply terminals supporting 3.0A each (Also serving as a hold-down)
- Hold-down structure adds protection to the top mating surface to prevent damage to the insulator (Armored)
- Metal fitting to prevent damage to the internal insulator surfaces during mating
- Improved workability for assembler with a clear click feeling when fully mated

- Highly reliable 2-point contact structure
- Nickel barrier on contact prevents solder wicking
- Supports MIPI, USB3.1 Gen2, and PCIe Gen3 transmission

Applications

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

Documents

Links

- [Special Contents | Connector Solutions for Small Device](#)

General Specifications

Number of Contacts	6, 8, 30 positions (+2 power)
Pitch	0.35 mm
Rated Current	Signal Terminal: AC, DC 0.3 A/pos. Power Supply Terminal: AC, DC 3.0 A/pos.
Rated Voltage	AC, DC 50 V
Contact Resistance	Signal Terminal: 70 milliohm max. (initial) Power Supply Terminal: 20 milliohm max. (initial)
Insulation Resistance	100 megohm min. (initial)
Dielectric Withstanding Voltage	AC 250 Vr.m.s.
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

Notice

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