

# WP27D Series (0.35 mm Pitch, Stacking Type Connector)

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



The WP27D Series is a 0.35 mm pitch low-profile stacking type board-to-board (FPC) connector with special hold downs that can be used as power supply terminals, and is ideal for high-density mounting in slim and compact information communication devices like smartphones. This product has a structure that adds protection to the mating surface to prevent damage to the insulator in case force is applied while connectors are misaligned. Also the hold-downs can be used as high-current terminals.

The WP27D Series saves board space and enhances design flexibility by reducing the number of terminals typically required in standard connectors.

## Features

- 0.35 mm pitch, 2 rows, 0.7 mm stacking height.
- Two terminals for power supply compatible with 3.0 A each.
- Hold-down structure adds protection to the mating surface to prevent damage to the insulator. (Armored)
- 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.
- Lead-free. (Nickel barrier on contact prevents solder wicking.)
- Signal contact supports 10 Gbps transmission rate.
- Supports MIPI, USB3.1 Gen2, and PCIe Gen3 transmission.

## Applications

Slim and compact information communication devices like smartphones

## General Specifications

<b>Number of Contacts</b>	10, 24, 30, 34, 38, 40, 50, 60 pos.
<b>Pitch</b>	0.35 mm 2 rows

<b>Rated Current</b>	Signal terminal: AC, DC 0.3 A/ terminal, Power terminal: AC, DC 3.0 A/ terminal
<b>Rated Voltage</b>	AC, DC 50 V
<b>Contact Resistance</b>	Signal terminal: 70 milliohm max. (initial), Hold-down for power supply: 20 milliohm max. (initial)
<b>Insulation Resistance</b>	100 megohm min. (initial)
<b>Dielectric Withstanding Voltage</b>	AC 250 Vr.m.s. for 1 minute
<b>Total Insertion Force</b>	1.5N x (n+4) max. (n: No. of pos.)
<b>Total Extraction Force</b>	0.15N x n min. (n: No. of pos.)
<b>Durability Mating Cycles</b>	30 mating cycles
<b>Operating Temperature Range</b>	-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