

Float Stack Connectors >

As automotive technology rapidly advances and vehicles become more connected, design engineers seek enhanced flexibility and performance in electric vehicle (EV) applications. Float Stack Connectors offer a wide range of mating heights to meet these diverse circuit demands. These connectors support high-current applications, while a large floating range compensates for tolerance variations, enabling smooth automated assembly. Float Stack Connectors ensure superior reliability with exceptional anti-vibration performance, for robust connections in demanding environments.

ADVANTAGES AND FEATURES

Provides design flexibility

Various mating heights (19.00 to 26.00mm)* and circuit sizes (20 to 80) are available to meet customer demands.

Enables automation assembly with tolerance compensation

The large floating range is ± 0.75 mm in x, y and z directions for high-volume assembly, increasing production.

Meets high-current demand

Power-pin options enable effective handling of high-current requirements.

Increases the contact reliability with excellent anti-vibration performance

These connectors have two points of contact for enhanced contact reliability.

Current	5.0A*4 (power pin) Signal 0.5A/pin (with power pin) Signal 1.0A/pin (without power pin)
Number of Circuits	20 to 80
Pitch	1.00mm
Operating Temperatures	-40 to +130°C
Vibration Classification Qualification	USCAR-2 V2 USCAR, LV214 Compliant

Note: Circuit sizes ranging from 12.00 to 18.00mm and 27.00 to 30.00mm are under development.



MARKETS AND APPLICATIONS

Automotive

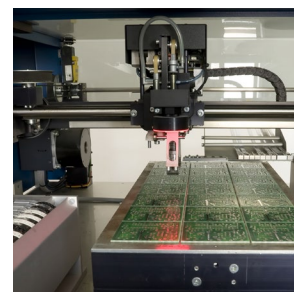
Battery management systems
DC-to-DC converters
Inverters
Motor control units
On-board chargers

Industrial Automation

Automation robot arms
Surface mount (SMT) machines



Inverters



SMT Machines

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SPECIFICATIONS

Reference Information

Packaging: Embossed tape with cover
Designed in: Millimeters
RoHS: Yes
Halogen Free: Yes
PFAS-free: Yes

Electrical

Rated Voltage (max.): 200V*
Current (max.):
 0.5A/signal pin with 5A Power*4pin
 1.0A/signal pin(without Power)
Contact Resistance:
 Signal pin: <60 mΩ
 Power Pin: <30 mΩ
Dielectric Withstanding Voltage: 1000V
Insulation Resistance: 100 MΩ

*Based on IEC_60664_1, Pollution Degree 1

Mechanical

Pitch: 1.00mm
Mated Height: 19.00, 20.00, 21.00, 22.00, 23.00,
 24.00, 25.00, 26.00mm
 12.00 to 18.00mm and 27.00 to 30.00mm
 (under development)
Width: 10.08mm
Length (PLUG):15mm+(N/2 Pins*1.0mm)
Floating: ±0.75 (x, y, z)
Lead-in:±1.5mm
Contact Type: Dual Contacts
Wiping Length:
 Terminal contact point 1— 2.52 ±0.75mm
 Terminal contact point 2—1.42 ±0.75mm
 Power Contact Point: 1.85 ±0.75mm
Structure Type: Vertical
Circuit Size: 20 to 80 circuits
Durability (max.): 20 cycles
Vibration Classification: USCAR-2 V2

Physical

Housing: LCP UL 94V-0
Contact: copper alloy
Plating:
 Contact Area—gold
 Solder Tail Area—gold
 Underplating—nickel
Operating Temperatures: -40 to +130°C