

CP54 series

High current, high voltage,
severe temperature differences

The CP54 is a single-row high-current socket that can be spliced, has no loop loss, and can be safely and quickly secured without tools. Optimal connection and reliability are achieved through its anti-misinsertion mating face, unique coding, and hook flange. The 3.5 mm long pins are suitable for wave soldering, and the insertion direction is at a 90-degree angle to the soldering pin.



50A High Current



High Voltage



Severe Temperature
Differences

Technical Specifications

Product Series : CP54 Series

Connection Type : Board Connection

Mounting Type : THT PCB Mounting

Spacing mm (P) : 10.16 mm

Outgoing Direction : 90°

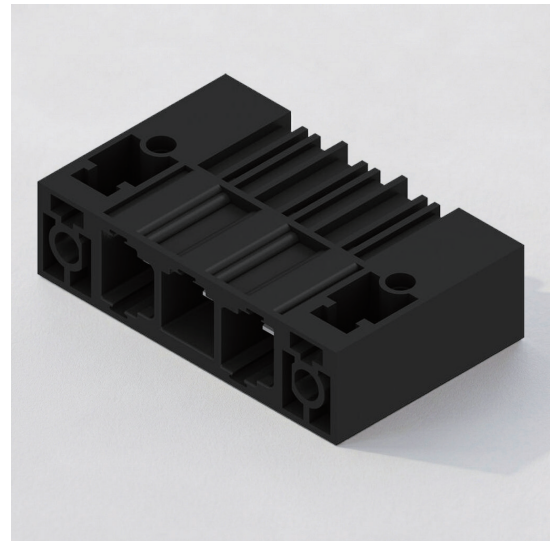
Number of Loops : 3

Channel Resistance : 2.00 mΩ

Insertion/Removal Cycles : ≤ 50

Min. Torque for Screw Flange : 0.3 kg/cm

Max. Torque for Screw Flange : 0.4 kg/cm



Safety & Protection Standards

Electric Shock Protection :

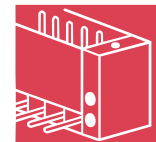
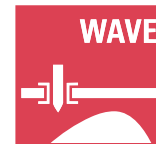
According to DIN VDE 57106 Insertion

Safety :

Finger Safety Protection During Insertion

IP Rating :

IP 20 (Inserted) according to DIN VDE 0470



Material Data Sheet

Insulating material : PBT GF

Comparative Tracking Index (CTI) : ≥ 200

UL 94 flammability rating : V-0

Contact material : Copper alloy

Layer structure of solder connection : $\geq 3 \mu\text{m Ag}$

Storage temperature, min. : $-25 \text{ }^\circ\text{C}$

Max. relative humidity during storage : 70%

Operating temperature, max. : $120 \text{ }^\circ\text{C}$

Max. installation temperature range : $120 \text{ }^\circ\text{C}$

Color : Black

Storage temperature, max. : $50 \text{ }^\circ\text{C}$

Operating temperature, min. : $-50 \text{ }^\circ\text{C}$

Installation temperature, min. : $-25 \text{ }^\circ\text{C}$

Main Applications

Due to its high voltage (up to 600V) and high current carrying capacity, this series is primarily used in the following industrial environments

- **Servo Drives & Inverters**
- **Solar & Energy Storage**
- **High-Power Power Supplies**
- **EV Charging Infrastructure**

Key Features

High Vibration Resistance :

The flanged (SF) design allows the terminal block to be secured to the PCB or housing with screws, preventing damage to solder joints from heavy cable pulling.

Safety Protection :

Compliant with UL 600V/50A standards, featuring touch-safe protection.

High Current Carrying Capacity :

Silver-plated contacts effectively reduce contact resistance, making them suitable for long-term operation under full current without oxidation.

