Bring up to 10 amps of power directly to the board while conserving PCB real estate

The new 4.00mm (.157”) pitch positive-locking terminal block connection system from Molex takes our already popular and patented design to the next level. Modeled after our Eurostyle™ Series 39980, 5.08mm (.200”) pitch and Eurostyle Series 39990, 5.00mm (.197”) pitch products, this 4.00mm (.157”) pitch system performs exactly the same as its larger relatives but takes up less space on the board.

With today’s trend towards miniaturization, this system allows customers to use up to 12 AWG wire to bring 10.0A of current directly to the board with a smaller pitch, conserving valuable PCB real estate without sacrificing performance. The unique positive-locking feature requires a standard screwdriver to disengage the plug from the header. Once mated, the connection is secure even in vibration-prone applications.

Molded from a glass-filled high temperature Polyamide 46, the PCB headers are ideal for applications that require reflow-solder capability. The positive-locking terminal block connection system is available in circuit sizes 2 through 12.

For additional information about this product visit: http://www.molex.com/product/poslatch_tb.html.

Features and Benefits

- Low-profile design provides a mated mounting height that is 25% shorter than a standard 5.00mm (.197”) pitch vertical plug/header mated pair.
- Positive-locking design requires a screwdriver to unmate the plug from the header ensuring a secure connection in vibration-prone applications and reduces the overall space required on the board by eliminating the need for traditional mounting ends.
- PCB headers are molded from high-temperature glass-filled PA46 nylon to withstand reflow-solder temperatures, which eliminates the need for a secondary wave-solder process.
- Design of plugs and headers includes a polarizing feature preventing mismating and also provides an audible indication when fully mated.

SPECIFICATIONS

Reference Information
Packaging: Tray
UL File No.: E48521, Pending
Flammability Rating: UL 94V-0
Mates With: 39484 mates with 39485
Designed In: Inches

Electrical
Voltage (max.): 300V
Current (max.): 10.0A (using 12 AWG wire)
Dielectric Withstanding Voltage: 1600V AC
Insulation Resistance: 5000 Megohms min.

Mechanical
Wire Range: 12 to 24 AWG
Wire Strip Length: 6.40mm (.250”)
Recommended Tightening Torque: 0.45 N-m (4 in-lbs.)
Plug Retention: 2 and 3 circuits — 8.9N (2 lbs.) min.
4 to 24 circuits — 44.5N (10 lbs.) min.
Durability (min.): 25 mating cycles

4.00mm (.157”) Positive-Locking Terminal Block System

39484 Tin-plated Plugs
39485 Tin-plated PCB Headers

Physical
Housing:
Polyamide PA46, glass-filled Nylon, Black
Plug Terminal: Phosphor Bronze
Plug Screw: Steel
Cage Clamp: Brass
Header Pin: Brass
Plating:
Plug Terminal — Hot Tin Dip, 3.8μm (150μin) min.
Plug Screw — Nickel, 3.8μm (150μin) min.
Cage Clamp — Nickel, 2.5μm (100μin) min.
Header Pin — Tin, 2.5μm (100μin) min.
over Nickel, 1.3μm (50μin) min.
Operating Temperature: -40 to +140°C
APPLICATIONS

- Instrumentation
- Sensors and transmitters
- Programmable logic controllers (PLCs)
- Elevator and conveyance controls
- Large-scale integration
- Industrial network interface
- High-end security and building controls

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Plug</th>
<th>PCB Header</th>
<th>Circuit Size</th>
<th>Terminal Plating</th>
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<tbody>
<tr>
<td>39484-0002</td>
<td>39485-0002</td>
<td>2</td>
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