Mini-Latch 2.50mm Wire-to-Board/ Wire-to-Wire Connector System

molex

Ideal for compact applications, the Mini-Latch 2.50mm Wire-to-Board/Wire-to-Wire Connector System provides electrical and mechanical reliability in a high-temperature design that meets consumer and industrial application requirements



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Features and Advantages



Housing lance fastened with terminal Provides improved terminal retention

Uses popular crimp terminals

Enables easy access to the crimp applicators as they are widely available in the market

2 to 15 circuits, single-row plug in vertical and horizontal orientations, wire-to-board and wire-to-wire configurations

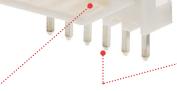
Offers design flexibility





Friction lock

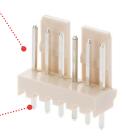
Provides secure mating retention of housing and header



Through-hole square terminals
Provides ruggedness and reliability

Polarizing features

Ensures mating in proper orientation



2.50mm-pitch connector

Provides space saving

RoHS compliance and high-temperature capabilities

Withstands harsh environments

Markets and Applications

Industrial Automation

Automation equipment

Consumer

White goods

Gaming machines

Drones

Air conditioners

Laser printers

Vacuum cleaners

Desktop PCs

Power tools

Automotive

Steering wheel, paddle shift, combination switches

Head-, rear- and side-mirror lights

Internal connection with other units



Drones



Gaming Machines



White Goods



Steering Wheel Switches



Industrial Automation

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Specifications

REFERENCE INFORMATION

Packaging: Reel (Terminal)

Poly Bag (Header Assembly/Receptacle Housing)

Mates With: Mini-Latch Connectors

Use With: 51191/5240 Terminal Used: 50802/5241 Designed In: Millimeters

RoHS: Yes Low Halogen: Yes

ELECTRICAL

Voltage (max.): 250V Current (max.): 3.0A (22 AWG) Contact Resistance (max.): 20 milliohms Dielectric Withstanding Voltage: 1000V AC (1 minute)

Insulation Resistance (min.): 1000 Megaohms

MECHANICAL

Crimp Terminal Insertion Force (max.): 14.7N Crimp Terminal Retention Force (min.): 14.7N Crimping Strength (min.): 39.2N (22 AWG)

Durability (max.): 30 Cycles

PHYSICAL

Housing:

Receptacle – PA66 Header – PA66

Contact: Phosphor, Bronze or Brass

Plating (Receptacle):

Contact Area — Pre-Tinned

Plating (Header): Brass

Contact Area — Tin over Copper Operating Temperature: -40 to +105°C

Ordering Information

| Series No. | Pitch (mm) | Component | Circuits | Rows | Color |
|--------------|------------|----------------------------|----------|--------|---------|
| 50802 | 2.50 | Female Receptacle Terminal | - | - | - |
| <u>5241</u> | | Male Plug Terminal | - | - | - |
| <u>51191</u> | | Receptacle Housing | 2 to 15 | Single | Natural |
| <u>5240</u> | | Plug Housing | | | |
| <u>5045</u> | | Vertical Header | | | |
| <u>5046</u> | | Right-Angle Header | | | |