

Mini-Lock Wire-to-Board Connector System

molex

2.50mm pitch Mini-Lock Wire-to-Board system is a longtime best-selling connector system, ideal for a wide range of applications

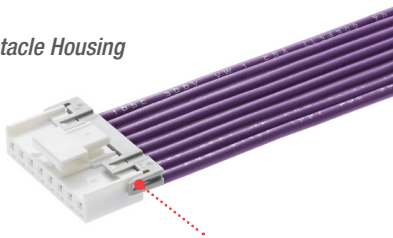
Features and Advantages

Readily available tooling

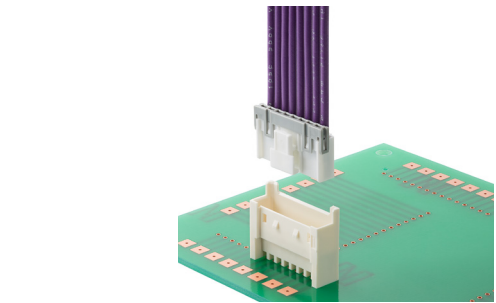
Use of popular terminals makes it easy to access the crimp applicators as they are widely available in the market



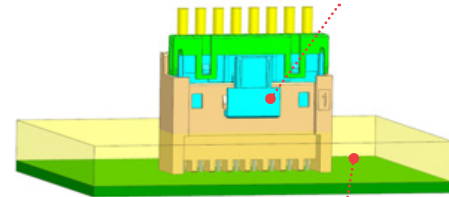
Receptacle Housing



Terminal Position Assurance (TPA)
Ensures wires are fully inserted



Header: 53517xx30



PCB

Potting treatment (Height 2.00mm to 6.00mm)
Prevents water ingress

Applications

Home Appliance

- Refrigerators
- Washers and dryers
- Air conditioners

Industrial

- Automation equipment
- Vending machines

Consumer

- Fitness equipment
- Gaming machines
- Security systems

Automotive

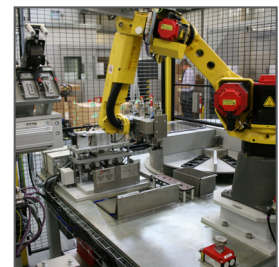
- Interior/exterior lightings
- Audio equipment
- Navigation systems



Home Appliance



Security System



Automation equipment

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Specifications

REFERENCE INFORMATION

Packaging:

- Reel 50752 Crimp Terminal
- Bag 51163 Rec HSG, 51164 TPA
- Tray 53517 Header

UL File No.: E29179

CSA File No.: LR19980

Mates With: 53517

Use With: 51163, 51164

Terminal Used: 50752

Designed In: Millimeters

RoHS: Yes

Halogen Free: No

Glow Wire Capable: Yes

ELECTRICAL

Voltage (max.): 250V

Current (max.): 3.5A (20 AWG)

Contact Resistance (max.): 20 Milliohms

Dielectric Withstanding Voltage: 1000V AC/min

Insulation Resistance (min.): 1000 Megohms

MECHANICAL

Contact Insertion Force (max.): 9.8N

Contact Retention to Housing (min.): 14.7N

Mating Force (max.): 58.8N (8 circuit)

Unmating Force (min.): 7.9N (8 circuit)

Durability (max.): 30 cycles

PHYSICAL

Housing:

- PBTP UL94V-0 (51163, 51164)
- PA66 UL94V-0 (53517)

Contact: Copper Alloy

Plating: Pre-Tin

Contact Area (min.): 0.9 micrometer

Header Pin: Phosphor Bronze

Plating: Pre-Tin

Contact Area (min.): 1.0 micrometer

Operating Temperature: -40 to +105°C

Ordering Information

Series No.	Component	AWG or Circuits	Glow Wire Capable
50752	Crimp Terminal	20 to 22 AWG (*1)	-
51163	Receptacle Housing	2 to 10	Yes
51164	TPA Retainer	2 to 10	
53517	Vertical Header for Potting	2 to 10 (*2)	

*1: 24 to 26 AWG under development

*2: 11 to 15 under development

www.molex.com/link/minilock.html

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