molex

Eliminating the need for mating header, EdgeMate™ power connector offers positive PCB-locking and significant cost savings for wire-to-edge-card terminations in appliance, industrial and lighting applications

Features and Benefits

Mates directly to the PCB edge card Reduced inventory, bill-of-material without a mating header and manufacturing costs without having to invest in headers Offers strong PCB-to-connector Positive-lock design retention Polarized housing Ensures correct orientation with the PCB Bifurcated (dual contact-point) Allows secondary current paths for terminals support up to 7.0A long-term electrical performance and reliability current Polarized crimp terminal Ensures correct terminal orientation and insertion

EdgeMate[™]
Wire-to-Edge-Card
Power Connectors,
3.96mm Pitch, with
Positive Lock

172159 Connector Housing (with or without lock)

172160 Bifurcated Crimp Terminals







EdgeMate[™] Wire-to-Edge Card Power Interconnects, with and without locking feature

Applications

Consumer/Home Appliances

Connectors without locking features

- Fitness

(option)

- Home Appliances
- Home Entertainment
- HVAC

Industrial

- Power (Power Supplies, UPS)
- Wire-to-Device

Solid State Lighting

- Indoor and Outdoor Illumination



Consumer Vehicles and Home Entertainment Systems

Versions without lock give greater

pricing flexibility to suit customer need



Indoor and Outdoor Lighting

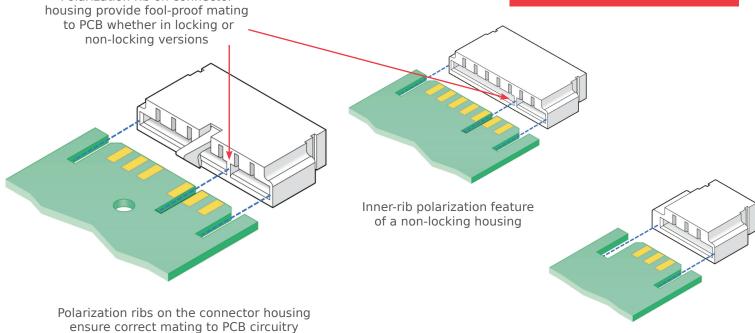


HVAC

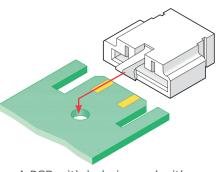


Product Features

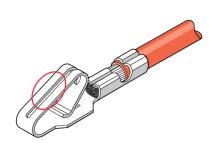
EdgeMate™ Wire-to-Edge-Card **Power Connectors,** 3.96mm Pitch, with Positive Lock Polarization rib on connector



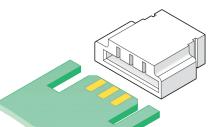
Additional Product Features



A PCB with hole is used with locking connector version

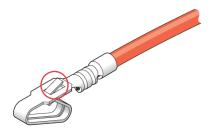


The bifurcated crimp terminal offers 2 points of contact (or secondary paths) for long-term electrical reliability



Thick-wall polarization feature of a non-locking housing

A PCB without hole is used with a non-locking version connector



Reverse side of crimped terminal showing locking tang feature which prevents accidental terminal back-out once inserted into the housing cavity



EdgeMate[™]
Wire-to-Edge-Card
Power Connectors,
3.96mm Pitch, with
Positive Lock

Specifications

Reference Information

Packaging:

Bag for Housing; Reel for Terminals

Mates With: Edge Card PCB (circuit size determined by customer)
Terminal Used: Series 172160

Designed In: Millimeters

RoHS: Yes

Halogen Free: Yes

Glow Wire Compliant: Under evaluation

Electrical

Voltage (max.): 250V Current (max.):

7.0Amps (Phosphor Bronze)

5.0Amps (Brass)

Contact Resistance (max.):

10 milliohms

Dielectric Withstanding Voltage:

1000V

Insulation Resistance (min.):

1000 Megohms

Mechanical

Contact Insertion Force (max.): 17.8N Contact Retention to Housing (min.):

35.6N

Durability (min.): 25 cycles

Physical

Housing: Nylon 6/6, UL94-V2

Contact: Refer Table

Plating:

Contact Area — Tin (Sn) Underplating — Nickel (Ni)

PCB Thickness: 0.062" (1.57mm) Operating Temperature: $0 \text{ to } +75^{\circ}\text{C}$

Ordering Information

Crimp Terminals

Part No.	Wire Range	Base Material	Finish
<u>172160</u> -1803	18-20 AWG	Phosphor Bronze	Tin (Sn)
172160-1806		Brass	

Housing with Positive Lock

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Part No.	Circuits	Part No.	Circuits
<u>172159</u> -0502	2	172159-0608	8
172159-0503	3	172159-0609	9
172159-0604	4	172159-0610	10
172159-0605	5	172159-0611	11
172159-0606	6	172159-0612	12
172159-0607	7	-	-

Housing without Lock

Part No.	Circuits	Part No.	Circuits
172159-0003	3	172159-0208	8
172159-0004	4	172159-0209	9
172159-0005	5	172159-0210	10
172159-0006	6	172159-0211	11
172159-0007	7	172159-0212	12