molex®

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

172159 Connector Housing (with or without lock)

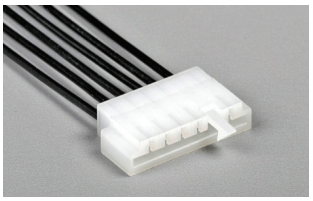
172160 Bifurcated Crimp Terminals

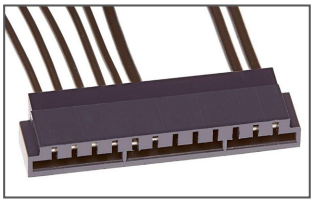
172879 Glow-wire compatible (IEC 60335-1)

Available in glow-wire-compatible versions, EdgeMate power connectors eliminate the need for mating headers, offering significant cost savings in appliance, industrial and lighting applications

Features and Benefits

Mates directly to the PCB edge card without a mating header	Reduced inventory, bill-of-material and manufacturing costs without having to invest in headers
Glow-wire compatible versions (meeting IEC 60355-1 safety standards)	Ensures safety and protection of end-users in the event of glow-wire overload
Positive-lock design (applicable to non glow-wire-compatible versions only)	Offers strong PCB-to-connector retention
Polarized housing	Ensures correct orientation with the PCB
Bifurcated (dual contact-point) terminals support up to 7.0A current	Allows secondary current paths for long-term electrical performance and reliability
Polarized crimp terminal	Ensures correct terminal orientation and insertion
Connectors without locking features (option)	Give pricing flexibility to suit customer needs





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

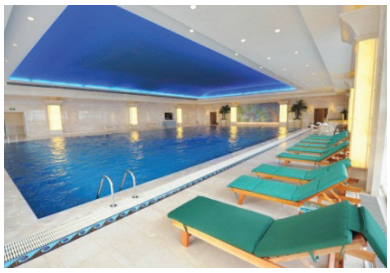
Applications

Consumer/Home Appliances
- – Fitness
- – 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



Indoor and Outdoor Lighting

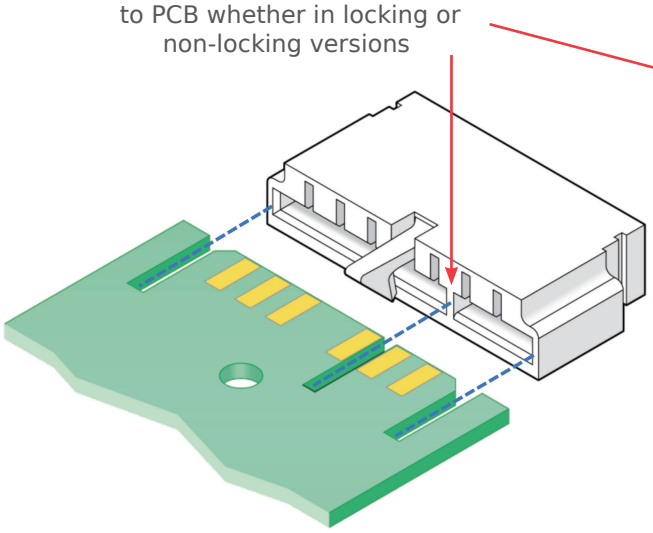
HVAC

molex®

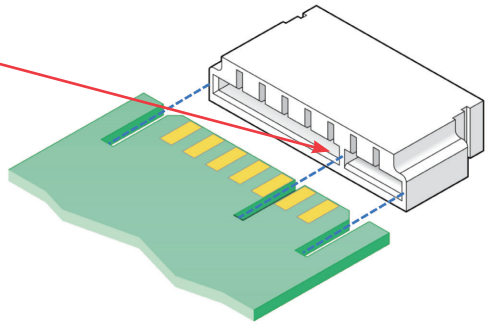
EdgeMate™ Wire-to-Edge-Card Power Connectors, 3.96mm Pitch, with Positive Lock

Product Features

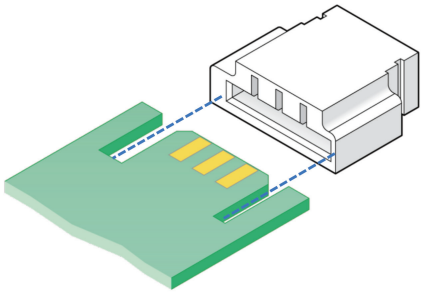
Polarization rib on connector housing provide fool-proof mating to PCB whether in locking or non-locking versions



Polarization ribs on the connector housing ensure correct mating to PCB circuitry

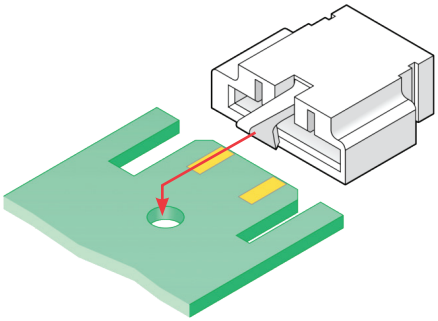


Inner-rib polarization feature of a non-locking housing

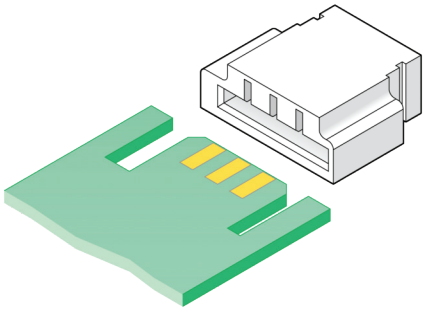


Thick-wall polarization feature of a non-locking housing

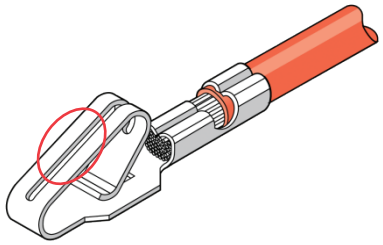
Additional Product Features



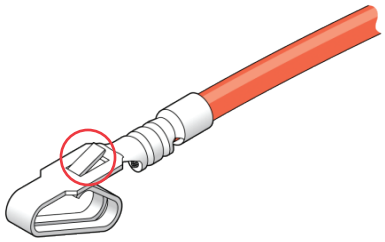
A PCB with hole is used with locking connector version



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



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



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

molex®

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:
Refer table below

Electrical
Voltage (max.): 250V
Current (max.):
7.0A (Phosphor Bronze)
5.0A (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 and Glow-wire UL94-V2
Plating:
Contact Area — Refer Table
Underplating — Nickel (Ni)
PCB Thickness: 1.57mm
Operating Temperature:
Brass Terminals -40° to +80°C*
Phosphor Bronze Terminals
-40° to +105°C*

*Including terminal temperature rise when applying electrical current.

Ordering Information

Crimp Terminals

Part No.	Wire Range	Base Material	Finish
172160-1802	18-20 AWG	Phosphor Bronze	Select Gold (Au)
172160-1803			Tin (Sn)
172160-1805		Brass	Select Gold (Au)
172160-1806			Tin (Sn)

Housing with Positive Lock

Part No.	Circuits	Part No.	Circuits
172159-0502	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
172159-0205	5	172159-0210	10
172159-0206	6	172159-0211	11
172159-0207	7	172159-0212	12

Housing without Lock (Glow-wire compatible versions)

Part No.	Circuits	Part No.	Circuits
172879-0003	3	172879-0208	8
172879-0004	4	172879-0209	9
172879-0205	5	172879-0210	10
172879-0206	6	172879-0211	11
172879-0207	7	172879-0212	12

www.molex.com/link/edgemate.html