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NANO-FIT **POWER CONNECTORS**

Nano-Fit Power Connectors deliver fully protected header terminals in a compact size and provide many feature options to ensure proper installation and excellent reliability in tight spaces; available in wire-to-board and wire-to-wire configurations.

ADVANTAGES AND FEATURES

Prevents damage to the connector or terminals by avoiding misalignment; decreases assembly time and mis-mating errors with blind-mate interface (BMI) connector design.

Provides a small package that eases space constraints; allows up to 69% more space in the x-axis than competing connectors as it is the smallest fully isolated header in the market.

Reduces operator fatigue due to its ultra-low mate force terminal.

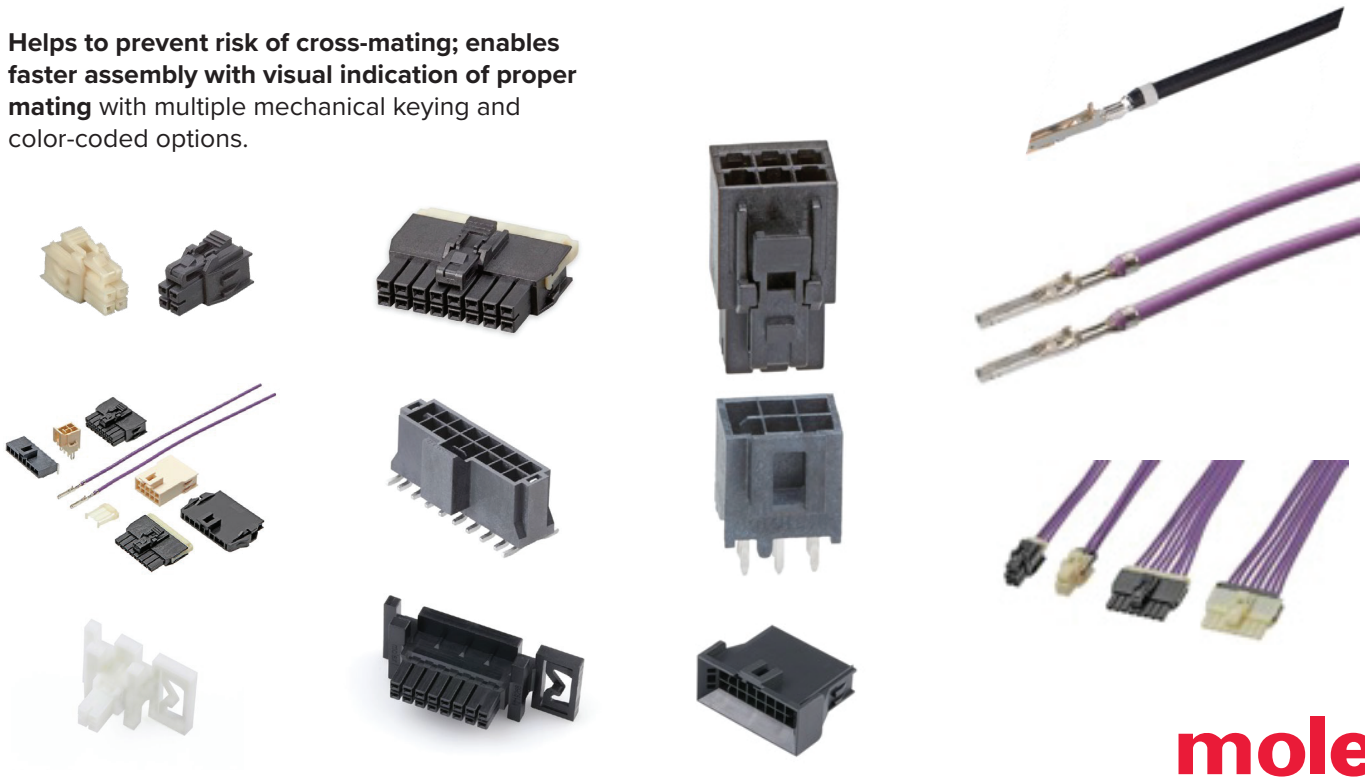
Reduces backout by ensuring terminals are fully seated in housing when using the TPA retainer option.

Helps to prevent risk of cross-mating; enables faster assembly with visual indication of proper mating with multiple mechanical keying and color-coded options.

Current	8.0A
Circuits	4 to 16
Height	2.50mm
Operating Temperature	-40 to +105°C (Tin) -40 to +115°C (Gold)

Offers redundant, secondary current paths for long term performance and reliability with multiple mechanical keying and color-coded options.

Ensures mated connector assemblies will not accidentally disengage as these connectors have positive-lock housing with an anti-snag design.



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MARKETS & APPLICATIONS

CONSUMER
Copiers
Small appliances
3D printers
Home appliances
Vacuum cleaners

AUTOMOTIVE
Non-critical applications
Telemetrics
Infotainment systems
Consoles
Equipment for USCAR-2 rated designs

Home Appliances

Infotainment Systems

SPECIFICATIONS

Reference Information
Packaging:
  Terminals: Reel
  Headers: Tray
  Receptacles: Bag
UL File No: E29179
CSA File No: LR19980
Mates with: Nano-Fit Connectors and Receptacles Only - No competitive cross
Use with: Nano-Fit Connectors and Receptacles Only - No competitve cross
Terminal Used: Reel
Designed in: Millimeters
RoHS: Yes
Halogen Free: Yes
Glow Wire Capable: Yes

Electrical
Voltage (Max): 250V
Current (Max): 8.0A
Contact Resistance: 10 milliohms change over life
Dielectric Withstanding Voltage: 1500V
Insulation Resistance: 1000 Megohms

Mechanical
Contact Insertion Force: 2.5N
Contact Retention to Housing: 27N
Insertion Force to PCB: 5N
Mating Force: 3N
Unmating Force: 3N
Durability (min.): 20 Tin, 50 Gold
Cycles: 20 cycles (Tin), 50 cycles (Gold)

Physical
Housing:
  Receptacle: Nylon UL 94V-0
  Header: LCP UL 94V-0
Contact: High-Conductivity Copper
Plating:
  Contact Area - Tin or 38µm, 76µm or 25µm (select Gold)
  Solder Tail Area - Tin
  Underplating - Nickel
PCB Thickness: 1.60 and 2.40mm
Operating Temperature:
  -40 to +115°C (Gold)

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ORDERING INFORMATION

Headers

Series	Row	Orientation	Circuits	Termination Style	Solder Clip	Color
105429	Dual	Vertical	4 to 16	SMT	No	Black and Natural
105431	Single	Vertical	2 to 8			
105430	Single	Right Angle	2 to 8			
105405	Dual	Right Angle	4 to 16			
105309	Single	Vertical	2 to 8	Through Hole		
105310	Dual		4 to 16			
105311	Single		2 to 8		Yes	
105312	Dual		4 to 16			
105313	Single	Right Angle	2 to 8		No	
105314	Dual		4 to 16			
219637	Dual	Right Angle	4 to 16			

Receptacle Housing

Series	Row	Circuits
105307	Dual	2 to 8
105308	Single	4 to 16
219268	Single	4 to 16

Plug Housing

Series	Row	Circuits	Panel Mount	Color
201444	Single	2 to 8	Panel Mount and Free Hang	Black and Natural
201444	Dual	4 to 16		
224556	Dual	4 to 16		

Terminal Position Assurance (TPA) Retainer

Series	Color	Circuits
105325	Black & Natural	2 to 8

Crimp Terminals

Series	Type	Wire Gauge (AWG)
105300	Female Terminal	20 to 22, 24 to 26
201447	Male Terminal	20 to 22, 24 to 26

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