

Nano-Fit™ Power Connectors 2.50mm Pitch

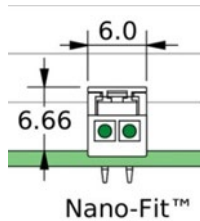


Nano-Fit™ Power Connectors deliver both fully protected header terminals and a small package, while also offering keying options to ensure proper mating and terminal position assurance (TPA) retainers to prevent terminal backout

Features and Advantages

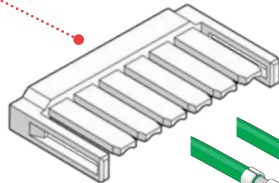
Smallest fully isolated headers in the market

Deliver up to 69% PCB space savings



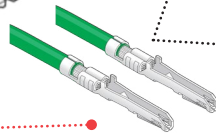
Optional TPA (terminal position assurance) retainer

Ensures terminals are fully seated in housing to reduce backout. Retains terminals if main retention feature fails



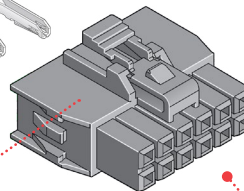
Ultra-low mate force terminal

Reduces operator fatigue. Improves assembly compliance for high-circuit applications



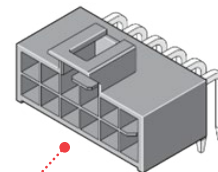
Positive-lock housing with anti-snag design

Ensures mated connector assemblies will not accidentally disengage. Provides audible click while mating. Protects latch from damage due to wire snags



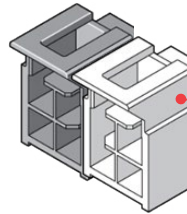
Fully isolated terminals

Protect against potential damage of terminals during handling and mating



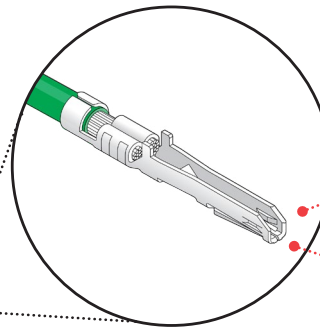
Multiple mechanical keying and color-coded options

Allow same-circuit, multiple-connector use with virtually no chance of cross mating. Color coding enables faster assembly with visual indication of proper mating



Retention tang and contact rib

Maintains stable contact



Terminal interface with 4 points of contact

Offers redundant, secondary current paths for long-term performance and reliability

Applications

Consumer/Home Appliance

Refrigerators

Washers and dryers

Telecommunications/Networking

Servers

Hubs

Automotive

Interior

Lighting

Lighting

Home lighting fixtures

Ballasts

Aerospace and Defense

C4ISR

Industrial

Assembly line equipment

Food and beverage

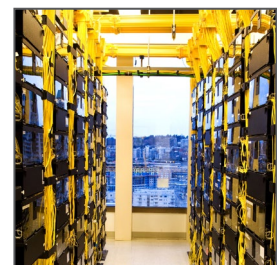
Medical

Healthcare IT

Patient care equipment



Infotainment Systems



Servers

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Specifications

REFERENCE INFORMATION

Packaging:
 Terminals – Reel
 Headers – Tray
 Receptacles – Bulk
 UL File No.: E29179
 CSA File No.: LR19980
 IEC File No.: Pending
 Mates With: Nano-Fit™ Connectors and Receptacles
 Terminal Used: Nano-Fit™
 Designed In: Millimeters
 RoHS: Yes
 Halogen Free: Yes

ELECTRICAL

Voltage (max.): 250V AC/DC
 Current (max.): 6.5A
 Contact Resistance Change Over Life (max.):
 10 milliohms (Gold); 20 milliohms (Tin)
 Dielectric Withstanding Voltage: 1600V
 Insulation Resistance (min.): 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

PHYSICAL

Housing:
 Receptacle: Nylon UL 94V-0
 Header: LCP UL 94V-0
 Contact: High-conductivity copper
 Plating:
 Contact Area – Tin or .381μ (15μ") Gold or
 .762μ (30μ") Gold
 Solder Tail Area – Tin
 Underplating – Nickel
 PCB Thickness: 1.60 and 2.40mm
 Operating Temperature: -40 to +115°C

Ordering Information

Series No.	Component	Orientation	Rows	Termination Style
105300	Female Crimp Terminal	—	—	—
105307	Single-Row Receptacle		Single	
105308	Dual-Row Receptacle		Dual	
105325	TPA Retainer		—	
105309	Header	Vertical	Single	Kinked Pin
105311				Solder Clip
105310			Dual	Kinked Pin
105312				Solder Clip
105313		Right-Angle	Single	Through Hole
105314			Dual	

www.molex.com/link/nanofit.html