

Ultra-Fit Power Connectors 3.50mm Pitch

Ultra-Fit Tangless connector is a wire-to-board and wire-to-wire system that offers a 3.50mm pitch, a higher current rating of 14.0A, and superior design options for flexibility and efficient assembly.

FEATURES AND ADVANTAGES

Multiple mechanical keying and color-coded options	Allow same-circuit, multiple connector use with virtually no chance of cross mating. Color coding provides visual indication of the proper mating connector — enabling faster assembly
17% reduction in pitch over similar power connectors	Current-dense design saves PCB space. Allows for smaller packaging without sacrificing current-carrying capabilities
Optional TPA (Terminal Position Assurance) retainer	Guarantees the terminal is fully seated in the housing to reduce terminal back-out. Retains terminal if main retention feature fails
Ultra low mating force terminal	Reduces operator fatigue and improves assembly compliance for high-circuit applications
Positive-lock housing with anti-snag design	Ensures mated connector assemblies will not accidentally disengage. Provides an audible click while mating. Protects latch from damage due to wire snags
Fully isolated terminals	Protect against potential damage of the header and receptacle terminals during handling and mating
Terminal interface with six independent points of contact (split-box terminal design)	Offers redundant, secondary current paths for long-term performance and reliability





Single-Row Receptacles with Mechanical Keying and Color Options





Optional TPA (Terminal Position Assurance) Retainer





Dual-Row Receptacles with Positive-Lock Housing



Dual-Row Wire-to-Wire Connector



Single-Row Wire-to-Wire Connector



Ultra-Fit Tangless Terminal



Dual-Row Vertical Header



Single-Row Vertical Header



Right-Angle Header With Solder Nail to Increase Board Retention



Ultra-Fit Tangless Connector



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APPLICATIONS

Consumer / Home Appliance

Refrigerators

Telecommunications/Networking

Hubs Servers

Transportation

Infotainment Interior

Lighting

Ballasts Home Lighting Fixtures

Aerospace and Defense

C4ISR

Industrial

Food and Beverage Assembly Line Equipment

Medical

Patient Care Equipment Healthcare IT







Patient Care Equipment



Home Appliance

SPECIFICATIONS

Reference Information

Packaging: Bag, Tray, Reel UL File No.: E29179 CSA File No.: LR19980 Mates With:

Series: 172258 Series: 172298 Series: 172256 Series: 172286

Use With:

Series: 172253 Series: 172258, 172256 Series: 172264 Series: 172258, 172256

Terminal Used: Series: 172253 Designed In: Millimeters

RoHS: Yes Halogen Free: Yes Glow Wire Capable: Yes

Electrical

Voltage (max.): 600V AC (RMS) or DC Current (max.): 14.0A Contact Resistance (max.): 7 milliohms Dielectric Withstanding Voltage: 1800 VAC Insulation Resistance (min.): 1000 Megohms

Mechanical

Pitch: 3.50mm

Contact Insertion Force (max.): 14.7 N (3.3 lbf)

Contact Retention to Housing: 24.5N
Insertion Force to PCB: 35N MAX
Mating Force: 4.5N MAX
Un-mating Force: 7 milliohms
Durability (min.): Mate connectors up to 25 cycles at a maximum rate of 10 cycles per minute

Physical

Housing: 94 V-/Glow Wire Combo Contact: High copper alloy Plating: Tin over nickel overall PCB Thickness: Standard 1.57mm Operating Temperature: -40 to +105°C



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ORDERING INFORMATION

Series No.	Component	Orientation	Rows	Termination Style
172253	Crimp Terminal			
172256	Receptacle Housing		Single	
172258	Receptacle Housing		Dual	
172286	Header	Vertical	Single	Kinked Pin
172287	Header	Vertical	Single	Soldier Clip
172298	Header	Vertical	Dual	Kinked Pin
172299	Header	Vertical	Dual	Soldier Clip
172310	Header	Right-Angle	Single	Through Hole
172316	Header	Right-Angle	Dual	Through Hole
216946	Crimp Terminal			
202569	Plug Housing		Single	
216945	Plug Housing		Dual	

TPA

Series No.	Component	Orientation	Color
172264	TPA	2 to 8	Black and Natural