BOARD/WIRE-TO-BOARD CONNECTORS



Minitek Pwr[™] 3.0

OVERVIEW

Minitek Pwr[™] 3.0 connectors are designed for power application with current rating up to 5A per circuit, available for dual row and 2 to 24 circuits, for Wire-To-Wire and Wire-To-Board application.

Crimp, snap-in header and receptacle contacts are used to terminate 30AWG-20AWG wires. Header and receptacle housings allow Wire-To-Wire and Wire-To-Board configurations. Crimping and removal tools are available for wire harness assembly.

Header assemblies for Wire-To-Board interconnections include vertical and right angle components. These wave soldering headers are available in through-hole configurations.



FEATURES

BENEFITS

Fully isolated terminals	 Prevents terminals from potential damage during operation 	
Positive locking on HSG with low thumb latch operation	Prevents from unexpectedly unmating	
Polarized mating geometry	Ensures header and receptacle are correctly mated	
Scoop-proof housings	 Ensures terminals and header pins are not damaged for angled mating 	
Fully polarized housings	Prevents accidental mis-mating	
High retention force in HSG	Well secures terminals in housings	
Low insertion force for installation of crimped terminal	Insertion tool is not required	
Available in UL94V-0 flammability rated LCP	High flammability rating	
• Vertical and right-angle PCB headers for wave soldering application	• Supports various 1.6mm PCB applications	
 Interchangeable and compatible with Molex Micro-Fit[™] 	Intermateable with Molex parts	
 Cost-effective Wire-To-Wire, free hanging headers and vertical or right-angle pin headers solution 	Flexible applications in various situations	
RoHS compliance and Lead-Free	Meet environmental, health and safety requirements	
Glow Wire Compliant series available	Supports home appliances requirements	

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TECHNICAL INFORMATION

MATERIALS

- Contact for Board Header Connector: Brass with optional Tin and Gold Flash plating
- Housing: LCP & Nylon, Black, UL94 V-0
- Terminal for Crimping: Phosphorus Bronze with optional Tin and Gold Flash plating

ELECTRICAL PERFORMANCES

- Low Level Contact Resistance: $20m\Omega$ max.
- Insulation Resistance: 1000M Ω min.
- Voltage Rating: 250V rms
- Current Rating: 5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 1000 VAC
- Temperature Rise: 30°C max.

ENVIRONMENTAL

- Operating Temperature: -40°C to +105°C
- Include 30°C terminal temperature rise at rated current

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 8.0N max.
- Terminal Withdrawal Force: 3.7N min.
- Durability: 100 cycles
- Wire Pullout Force: Refer to product specifications

SPECIFICATIONS

- Product: GS-12-1177
- Package: GS-14-2359
- Application: GS-20-0399

TOOL INFORMATION

- Ratched hand crimping tool: 10129483-001LF
- Terminal extract tool: 10129274-030LF

PART NUMBERS

Description	Part Number
Right angle PCB Header, Through-hole	10127720
Vertical PCB Header, Through-hole	10127721
Receptacle Housing	10127716
Header Housing	10127717
Receptacle Terminal	10127718
Header Terminal	10127719

APPROVALS AND CERTIFICATIONS

• UL E66906 & E467317

PACKAGING

- PCB Header: Tray
- Crimping Housing: Bag
- Terminal: Reel

TARGET MARKETS/APPLICATIONS

- Consumer
 - Set Top Box
 - WiMax Box
 - Display System
- Industrial & Instrumentation
 - Multi-service Station
 - Display System
 - Electrical Lighting
 - Hospital Bed
 - Chemical Detection System
- Data
 - Fan
 - Rack-Mount/Blade Server
 - Interface Converter
 - HDD Application
- Communications
 - WiMax Box
 - Generic Telecom Box
 - Customer Premises Equipment

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