

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 plug and receptacle contacts are used to terminate AWG 20–30 wires. Plug 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

- Fully isolated terminals
- Positive locking on HSG with low thumb latch operation
- Polarized mating geometry
- Scoop-proof housings
- Fully polarized housings
- High retention force in HSG
- Low insertion force for installation of crimped terminal
- Available in UL94V-0 flammability rated LCP
- Vertical and right-angle PCB headers for wave soldering application
- Interchangeable and compatible with Molex Micro-Fit™
- Cost-effective Wire-to-Wire, free hanging plugs and vertical or right-angle pin headers solution
- RoHS compliance and Lead-Free

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BENEFITS

- Prevents terminals from potential damage during operation
- Prevents from unexpectedly unmating
- Ensures header and receptacle are correctly mated
- Ensures terminals and header pins are not damaged for angled mating
- Prevents accidental mis-mating
- Well secures terminals in housings
- Insertion tool is not required
- High flammability rating
- Supports various 1.6mm PCB applications
- Intermateable with Molex parts
- Flexible applications in various situations
- Meet environmental, health and safety requirements



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 PERFORMANCE

- Low Level Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ 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
- Includes 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: 100129483-001LF
- Terminal extract tool: 10129274-030LF

PART NUMBERS

Description	Part Number
PCB Header Right-Angle, Through Hole	10127720
PCB Header Vertical, Through Hole	10127721
Receptacle Housing	10127716
Plug Housing	10127717
Female Terminal	10127718
Male Terminal	10127719

APPROVALS AND CERTIFICATIONS

- UL E66906 & E467317

PACKAGING

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

TARGET MARKET/ 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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