

Minitek Pwr™ 4.2

OVERVIEW

Minitek Pwr™ 4.2 connectors are designed for high-current, high-density application. It is ideal for power application with current rating up to 9A per circuit, available for dual row and 2 to 24 circuits, for Wire-to-Board, Wire-to-Wire, and Wire-to-Panel mount application.

Crimp, snap-in plug and receptacle contacts are used to terminate AWG 16-28 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 in interconnections include vertical and right angle components. These wave soldering headers are available in through-hole configurations. A right angle version cable receptacle is also available.

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| 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 | |
| Wire-to-Wire, Wire-to-Board and Wire-to-Panel connectors with 4.2mm centerline | Flexible applications in various situations | |
| Available in UL94V-0 flammability rated nylon | High flammability rating | |
| Vertical and right-angle PCB headers for wave soldering application | Supports various 1.6mm PCB applications | |
| Interchangeable and compatible with Molex Mini-Fit JR™ | Intermateable with Molex parts | |
| RoHS compliance and Lead-Free | Meet environmental, health and safety requirements | |
| Special right-angle type receptacle | Ideal for cable routing within 1U or 2U equipment systems | |

TECHNICAL INFORMATION

MATERIALS

- Contact for Board Header Connector: Brass with optional Tin and Gold Flash plating
- Housing: Nylon 66, Natural color, UL94V-0
- Terminal for Crimping: Brass/ Phosphorus Bronze with optional Tin and Gold Flash plating

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: $10m\Omega$ max.
- Insulation Resistance: $1000M\Omega$ min.
- · Voltage Rating: 600V rms
- · Current Rating: Up to 9A/contact
- Dielectric Withstand Voltage: 1500 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: 14.7N max.
- Terminal Withdrawal Force: 1N min.
- · Durability: 30 cycles
- Wire Pullout Force: Refer to product specifications

SPECIFICATIONS

- Product Spec: GS-12-1181 • Package Spec: GS-14-2362
- Application Spec: GS-20-0401

TOOL INFORMATION

- · Ratched hand crimping tool: 100129483-001LF
- Terminal extract tool: 10129274-042LF

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

PART NUMBERS

| Description | Part Number |
|---------------------------------|-------------|
| PCB Header Right-Angle w/o pegs | 10127819 |
| PCB Header Vertical w/o pegs | 10127820 |
| R/A Receptacle Housing | 10122957 |
| Receptacle Housing | 10127815 |
| Panel Mount Plug Housing | 10127816 |
| Female Terminal | 10127817 |
| Male Terminal | 10127818 |