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

- 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 headers and vertical or right-angle pin headers solution
- RoHS compliance and Lead-Free
- Glow Wire Compliant series available

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
- 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: 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
• 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

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

PART NUMBERS

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Right angle PCB Header, Through-hole</td>
<td>10127720</td>
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<tr>
<td>Vertical PCB Header, Through-hole</td>
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<tr>
<td>Receptacle Housing</td>
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<tr>
<td>Header Housing</td>
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<tr>
<td>Receptacle Terminal</td>
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<td>Header Terminal</td>
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