

MINITEK® PWR 3.0 CONNECTOR SYSTEM

Dual Row & Single Row

COMPACT, ROBUST AND VERSATILE

Minitek® Pwr 3.0 is a flexible and comprehensive solution designed for power application with current rating up to 5A per circuit. It is available in 2 to 24 circuits for dual row and 2 to 12 circuits for single row.

- Solutions for Wire-to-Board and Wire-to-Wire applications
- Low insertion force for installation of crimped terminal makes it easy to use
- Polarized mating geometry prevents mismatching
- Fully isolated terminals prevents terminals from damage
- Blind mating interface (BMI) option in vertical, through hole type for dual row. 8, 12 and 14 positions available



TARGET MARKETS



FEATURES

- Low insertion force for installation of crimped terminal
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- Scoop-proof housings
- High retention force in housing
- Glow wire compliant option
- BMI option
- UL94V-0 flammability rated LCP material
- RoHS compliant and lead-free

BENEFITS

- Easy to use
- Prevents terminals from potential damage during operation
- Ensures secured mating retention
- Prevents accidental mismatching
- Ensures terminals and header pins are not damaged for angled mating
- Well secured terminals in housing
- Complies with International Standard IEC 60335-1 for household appliances
- Allows ± 2.54 mm gatherability for blind mating
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

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

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 4.5N max.
- Terminal Withdrawal Force: 2N min. before durability, 1.5N min. after durability
- Durability: 100 mating cycles
- Wire Pullout Force: Refer to product specifications

APPROVALS AND CERTIFICATIONS

- Dual Row: UL E66906 & E467317
- Single Row: UL pending
- Glow Wire Ignition Temperature (GWIT) per IEC 60695-2-13
- Glow Wire Flammability Index (GWFI) per IEC 60695-2-12

PACKAGING

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

TOOLING INFORMATION

- Ratchet Hand Crimping Tool: 10129483-001LF
- Terminal Extraction Tool: 10129274-030LF

ENVIRONMENTAL

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

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 20mΩ max.
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 250Vrms
- Current Rating: 5A/contact. Refer to product specifications for higher current application
- Dielectric Withstand Voltage: 1000VAC
- Temperature Rise: 30°C max.

SPECIFICATIONS

- Product Specification: GS-12-1177
- Application Specification: GS-20-0399
- Packaging Specification: GS-14-2359

TARGET MARKETS/APPLICATIONS



1U Rack Box
Generic Telecom Box
WiMax Box
Interface Converter
Customer Premises Equipment



Air Conditioner
Microwave Oven
Set Top Box
Refrigerator



HDD Application
Rack-Mount Server
Blade Server
Server-Orthogonal Configuration
Desktop PC and Motherboard



Hospital Bed
Defibrillator
Patient Monitor
Ultrasound Equipment



Chemical Detection System
Radar Equipment

PART NUMBERS

| Type | Description | Part Numbers |
|---------------------------|--|--------------|
| Dual row | Right angle PCB header, through hole | 10127720 |
| | Vertical PCB header, through hole | 10127721 |
| | Receptacle housing | 10127716 |
| | Header housing | 10127717 |
| | Right angle PCB header, SMT | 10137924 |
| | Right angle PCB header, DIP boardlock | 10137925 |
| | Vertical PCB header, SMT | 10137926 |
| | Vertical PCB header, DIP boardlock | 10137927 |
| | Vertical PCB header, through hole (BMI) | 10138980 |
| Single row | Right angle PCB header, through hole | 10136654 |
| | Right angle PCB header, SMT tail & hold down | 10136655 |
| | Vertical PCB Header, through hole | 10136656 |
| | Right angle PCB header, SMT tail & DIP boardlock | 10137867 |
| | Receptacle housing | 10136653 |
| Applicable for both types | Receptacle terminal | 10127718 |
| | Header terminal | 10127719 |