

Minitek® Pwr 2.5 Connector System

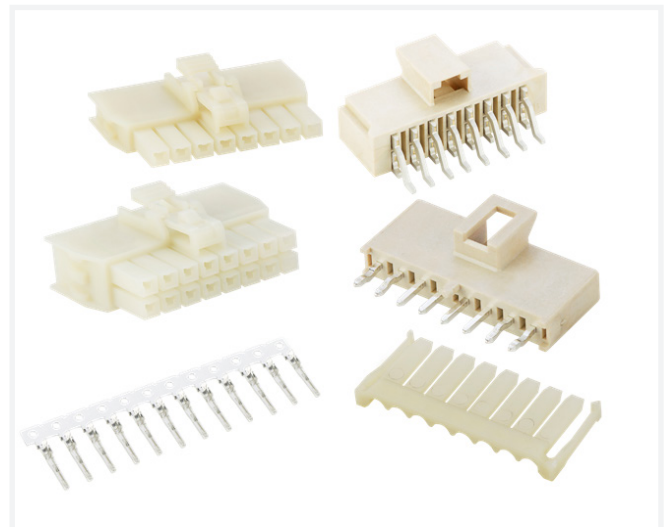
2.5MM SPACE–SAVING SOLUTION WITH CURRENT RATING UP TO 6.5A

Minitek® Pwr 2.5 is a space-saving and comprehensive solution designed for power application with a current rating of up to 6.5A per circuit. It is available in 4 to 16 circuits in dual row, and 2 to 8 circuits in single row. The connector uses crimp, snap-in header and receptacle contacts that are used to terminate 26AWG–20AWG wires. Minitek® Pwr 2.5 features polarized mating geometry, this helps to prevent mismatching. It offers a wide operating temperature, ranging from –40°C to 105°C, making it suitable for a wide range of applications. The scoop proof housing prevents terminals from damage.

- 2.5mm small pitch design for wire-to-board application
- 69% PCB space savings with high power
- High current rating up to 6.5A per contact
- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Solution for vertical through hole, right angle through hole, right angle SMT (both dual and single row)

FEATURES

- High current alloy material used for contact
- Small pitch for wire-to-board application
- Fully isolated terminals
- Positive locking on housing with low thumb latch operation
- Fully polarized housings
- Scoop-proof housings
- High retention force in housing
- Post-plated terminal
- Glow wire compliant option
- UL94V-0 flammability rated LCP material
- RoHS compliant and lead-free
- Halogen-free resin material



TARGET MARKETS



BENEFITS

- Rated up to 6.5A per contact
- 69% PCB space savings
- Prevents terminals from potential damage during operation
- Ensures secure mating retention
- Prevents accidental mismatching
- Ensures terminals and header pins are not damaged for angled mating
- Well secured terminals in the housing
- Prevents environmental corrosion such as salt spray and gas corrosion
- Complies with International Standard IEC 60335-1 for household appliances
- High flammability rating
- Meet environmental, health and safety requirements
- Meets environmental standards

TECHNICAL INFORMATION

MATERIAL

- Board Connector: Copper Alloy with optional Tin and Gold plating
- Housing: PA4T and LCP, Natural, UL94V-0
- Crimping Terminal: Copper Alloy with optional Tin and Gold plating

ELECTRICAL PERFORMANCE

- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 250V AC (RMS)/DC
- Contact Resistance: Tin plated 10mΩ / Gold Plating 5mΩ max.
- Current Rating: Up to 6.5A/Contact

MECHANICAL PERFORMANCE

- Durability: Tin plated 25 cycle / Gold plated: 50 cycle
- Mating Force: Tin plated 3.5N / Gold plated 1.25N per circuit Max.
- Unmating Force: Tin plated 1.0N / Gold plated 0.5N per circuit Max.

ENVIRONMENTAL

- Operating Temperature: -40°C to 105°C

APPROVALS AND CERTIFICATIONS

- UL approval: Pending

SPECIFICATIONS

- Product Specification: GS-12-1456
- Packaging Specification: GS-14-2610

PART NUMBERS

Description	Part Numbers
Minitek® Pwr 2.5 Vertical Header Through Hole, Single Row	10146242
Minitek® Pwr 2.5 Receptacle Housing, Single Row	10146579
Minitek® Pwr 2.5 Receptacle TPA	10146626
Minitek® Pwr 2.5 Crimping Terminal	10146583
Minitek® Pwr 2.5 Receptacle Housing, Dual Row	10146580
Minitek® Pwr 2.5 Vertical Header Through Hole, Dual Row	10146581
Minitek® Pwr 2.5 Right Angle Header Through Hole, Dual Row	10146582
Minitek® Pwr 2.5 Right Angle Header SMT, Dual Row	10146243

PACKAGING

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

TARGET MARKETS/APPLICATIONS



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



Air Conditioner
Microwave Oven
Refrigerator
Set Top Box



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



Defibrillator
Hospital Bed
Patient Monitor
Ultrasound Equipment



Chemical Detection System
Radar Equipment