

# MINITEK® PWR 3.0 BMI

## Blind Mate Interface (BMI) Connector

### ROBUST AND VERSATILE SELF-ALIGNING CONNECTOR

Minitek® Pwr 3.0 BMI is a flexible and comprehensive solution designed for power application with current rating up to 5A per circuit. It is available in 8, 12 and 14 circuits for dual row.

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



### FEATURES

- Blind mate interface
- 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
- UL94V-0 flammability rated LCP material
- RoHS compliant and lead-free

### BENEFITS

- Allows  $\pm 2.54$ mm gatherability for blind mating
- 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
- 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 Number
Dual row	Vertical PCB header, through hole (BMI)	10138980