Minitek® Pwr 4.2 BMI Connector System

Blind Mate Interface (BMI) Connector

ROBUST AND VERSATILE SELFALIGNING CONNECTOR

Minitek® Pwr 4.2 BMI is a flexible and comprehensive solution designed for power application with current rating up to 9A per circuit. It is available in 24 circuits for dual row.

- Scoop proof housing prevents terminals from damage
- Polarized mating geometry to prevent mismatching
- Fully isolated terminal stop prevent terminals from damage
- BMI option in vertical, through–hole type for dual row. 24 positions available

TARGET MARKETS

FEATURES

- Blind mate interface
- Fully isolated terminals
- Fully polarized housings
- Scoop–proof housings
- Glow wire compliant option
- UL94V–0 flammability rated nylon material
- RoHS compliant and lead–free

BENEFITS

- Allows ± 2.54mm gatherability for blind mating
- Prevents terminals from potential damage during operation
- Prevents accidental mismating
- Ensures terminals and header pins are not damaged for angled mating
- Complies with International Standard IEC 60335–1 for household appliances
- High flammability rating
- Meets environmental, health, and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Board Connector: Copper Alloy with optional Tin and Gold plating

- Housing: Nylon 66, Natural & Black, UL94V-0

- Crimping Terminal: Copper Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

- Insertion Force: 14.7N max.

- Withdrawal Force: 1N min.

- Durability: 30 mating cycles

- Wire Pullout Force: Refer to product specifications

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 10mΩ max.

- Insulation Resistance: 1000MΩ min.

- Voltage Rating: 600Vrms

- Current Rating: Up to 9A/contact

- Dielectric Withstand Voltage: 2200VAC

- Temperature Rise: 30°C max.

PACKAGING

- PCB Header: Tray

- Cable Housing: Bag

- Terminal: Reel

APPROVALS & CERTIFICATION

- Dual Row: UL E66906 & E467317

- Glow Wire Ignition Temperature (GWIT) per IEC 60695-2-13

- Glow Wire Flammability Index (GWFI) per IEC 60695-2-12

SPECIFICATION

- Amphenol Application Specification: GS-20-0401

- Amphenol Packaging Specification: GS-14-2362

ENVIRONMENTAL

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

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

PART NUMBERS

Type	Description	Part Numbers
Dual Row	Vertical PCB header, through hole (BMI)	10138978
Terminal	Receptacle terminal (pre-plated solution)	10134170