

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 8.5A 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 and Right angle through hole type for dual row



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 ± 2.54mm gatherability for blind mating
- High flammability rating
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Header: Copper alloy with optional tin and gold platings
- Housing: LCP and nylon, black and natural, UL94 V-0
- Crimping Terminal: Copper alloy with optional tin and gold plating

MECHANICAL PERFORMANCE

- Terminal Insertion Force: 4.1N per circuit (6 N after durability)
- Terminal Withdrawal Force: 1.5N min. (Tin plated)& 0.6N min. (Au plated)
- 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: 8.5A max. Refer to product specifications for per contact current ratings
- Dielectric Withstand Voltage: 1000VAC
- Temperature Rise: 30°C max

PACKAGING

- PCB Header: Tray or tape and reel
- Receptacle Housing: Bag
- Terminal: Reel

APPROVALS & CERTIFICATION

- 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

SPECIFICATION

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

ENVIRONMENTAL

- Operating Temperature: -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	Receptacle Housing	10127716
	Plug Housing	10127717
	Right Angle Through Hole Header	10127720
	Vertical Through Hole Header	10127721
	Right Angle SMT Tails and Hold Down Header	10137924
	Right Angle SMT Tails and DIP Hold Down Header	10137925
	Vertical SMT Tails and Hold Down Header	10137926
	Vertical SMT Tails and DIP Hold Down Header	10137927
	Vertical BMI Through Hole Header	10138980
	Right Angle BMI Through Hole Header	10144754
	Vertical Through Hole Header with Metal Harpoon	10158340
	Right Angle Through Hole Header with Metallic Board Lock	10161838
	BMI Receptacle Housing	10159684
	BMI Plug Housing	10160855
	Vertical Press Fit Header	10159685
Single Row	Receptacle Housing	10136653
	Right Angle Through Hole Header	10136654
	Right Angle SMT Tails and Hold Down Header	10136655
	Vertical Through Hole Header	10136656
	Right Angle SMT Tails and DIP Board Lock Header	10137867
	Right Angle Through Hole Header with Board Lock	10151857
	Vertical Kinked Through Hole Header	10157052
	Vertical SMT Header	10159410
	Vertical SMT Header with Solder Tab	10162511
Terminals	Receptacle Terminal	10134160/10127718
	Plug Terminal	10161703/10127719

TOOLING INFORMATION

APPLICATORS

Terminal Part Number	AWG Range	Semi-Auto Crimping machine	Fully-Auto Pneumatic Crimping Applicator	Fully-Auto Mechanical Crimping Applicator
10127719-00XXLF 10127718-00XXLF	20 AWG	10159974-001	10159975-001	10159976-001
	22 AWG			
	24 AWG			
10134160-X210LF	16 AWG	10159974-003	10159975-003	10159976-003
	18 AWG			
	20 AWG			
10134160-X220LF	20 AWG	10159974-004	10159975-004	10159976-004
	22 AWG			
	24 AWG			
10134160-X230LF	26 AWG	10159974-005	10159975-005	10159976-005
	28 AWG			
	30AWG			

HAND CRIMP TOOLS

Terminal Part Number	AWG Range	Fully-Auto Mechanical Crimping Applicator
10127719-00XXLF 10127718-00XXLF	20 AWG	10159387-001
	22 AWG	
	24 AWG	
10134160-X210LF	16 AWG	10159387-003
	18 AWG	
	20 AWG	
10134160-X220LF	20 AWG	10159387-004
	22 AWG	
	24 AWG	
10134160-X230LF	26 AWG	10159387-005
	28 AWG	
	30AWG	

TERMINAL EXTRACTION TOOL – 10129274-030LF