

## Minitek® Pwr 5.7 Connector System

### 5.70MM COMPREHENSIVE SOLUTION WITH CURRENT RATING UP TO 23A

Minitek® Pwr 5.70mm is a flexible and comprehensive solution for power application with high current rating up to 23A per contact and wire gauge range from 16 – 12AWG for wire-to-board application. Minitek® Pwr 5.70mm features polarized mating geometry, this helps to prevent mis-mating. It offers a wide operating temperature, ranging -40°C to 105°C, making it suitable for a wide range of applications. The scoop proof housing prevents terminals from damage. It is available in 2 to 12 circuits for dual row.

- High current rating up to 23A per contact
- Solution for Vertical & Right Angle Through Hole
- Solution for wire-to-board



#### TARGET MARKETS



#### FEATURES

- High current alloy material used for contact
- Positive locking on housing with low thumb latch operation
- High retention force in housing
- Post-plated terminal
- Glow wire compliant
- UL94V-0 flammability rated LCP material
- Halogen-free resin material
- RoHS compliant and lead-free

#### BENEFITS

- Rated up to 23A per contact
- Ensures secured mating retention
- Well secured terminal in housing
- Prevents environmental corrosion such as salt spray and gas corrosion
- Complies with International Standard IEC 60335-1 for household appliances
- High flammability rating
- Meets environmental standards
- Meets environmental, health and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Board Connector: High-conductivity copper with optional tin and gold plating
- Header Housing: LCP, black & natural, UL 94V-0
- Receptacle Housing: Nylon 66, black & natural, UL 94V-0 & UL 94V-2
- Crimping Terminal: High-conductivity copper with optional tin and gold plating

### MECHANICAL PERFORMANCE

- Mating Force:
  - Tin plated: 6.8N
  - Gold plated 6.0N per circuit max.
- Unmating Force:
  - Tin plated: 6.5N
  - Gold plated: 5.6N per circuit max.
- Durability:
  - Tin plated: 25 cycles
  - Gold plated: 200 cycles

### ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 2mΩ max. (Initial)
- Insulation Resistance: 1000MΩ min.
- Voltage Rating: 600V AC (RMS)/DC
- Contact Resistance: Tin plated 10mΩ / gold plating 5mΩ max.
- Current Rating: Up to 23A/contact
- Dielectric Withstand Voltage : 2200V AC

### PACKAGING

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

### APPROVALS & CERTIFICATION

- UL approval: E66906
- TUV approval: B171234414032

### SPECIFICATION

- Amphenol Product Specification: GS-12-1405
- Amphenol Packaging Specification: GS-14-2595
- Amphenol Application Specification: GS-20-0687

### ENVIRONMENTAL

- Operating Temperature Range:
  - Gold Plated: -40°C to 120°C
  - Tin Plated: -40°C to 105°C

### 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	Product Series
Dual Row	Receptacle Housing (UL 94 V-2)	10142707
	Vertical Through Hole Header	10142708
	Right Angle Through Hole Header	10146997
	Receptacle Housing (UL94 V-0)	10158453
Terminals	Receptacle Terminal	10158070

## TOOLING INFORMATION

### APPLICATORS

Terminal Part Number	AWG Range	Semi-Auto Crimping Machine	Fully-Auto Pneumatic Crimping Applicator	Fully-Auto Mechanical Crimping Applicator
10158070-101LF 10158070-111LF 10158070-121LF 10158070-131LF	14 AWG	10160975-001	10161844-001	10161845-001
	16 AWG	10160975-002	10161844-002	10161845-002
10158070-102LF 10158070-112LF 10158070-122LF 10158070-132LF	12 AWG	10160975-003	10161844-003	10161845-003

### HAND CRIMP TOOL

Terminal Part Number	AWG Range	Hand Crimp Tool Part Number
10158070-1XXLF	12 AWG	10160974-001
	14 AWG	
	16 AWG	