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



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: $2m\Omega$ max. (Initial)
- Insulation Resistance: 1000M Ω min.
- Voltage Rating: 600V AC (RMS)/DC
- Contact Resistance: Tin plated $10m\Omega$ / gold plating $5m\Omega$ 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

▶ Minitek® Pwr 5.70 Connector System

PART NUMBERS

Туре	Description	Product Series
	Receptacle Housing (UL 94 V-2)	10142707
Dual Row	Vertical Through Hole Header	10142708
	Right AngleThrough 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	14 AWG	10160975-001	10161844-001	10161845-001
10158070-111LF 10158070-121LF 10158070-131LF	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	
	10158070-1XXLF	14 AWG		
		16 AWG		