Minitek® Pwr 5.7 Connector System

5.7MM COMPREHENSIVE SOLUTION WITH CURRENT RATING UP TO 23A

Minitek® Pwr 5.7mm 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 5.7mm 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	▪ Rated up to 23A per contact
▪ Positive locking on housing with low thumb latch operation	▪ Ensures secured mating retention
▪ High retention force in housing	▪ Well secured terminal in housing
▪ Post-plated terminal	▪ Prevents environmental corrosion such as salt spray and gas corrosion
▪ Glow wire compliant	▪ Complies with International Standard IEC 60335-1 for household appliances
▪ UL94V-0 flammability rated LCP material	▪ High flammability rating
▪ Halogen-free resin material	▪ Meets environmental standards
▪ RoHS compliant and lead-free	▪ 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

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBERS

Type	Description	Product Series
Dual Row	Receptacle Housing (UL 94 V-2)	10142707
	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 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	

BASICSMPWR57032IEA

Disclaimer
Please note that the above information is subject to change without notice.