

Minitek® Pwr 5.7 Connector System

5.70 MM COMPREHENSIVE SOLUTION WITH CURRENT RATING UP TO 30 A

Minitek® Pwr 5.70 mm is a flexible and comprehensive solution for power application with high current rating up to 30 A per contact and wire gauge range from 16 AWG to 10 AWG for wire-to-board application. Minitek® Pwr 5.70 mm features a polarized mating geometry, which helps to prevent mis-mating. It offers a wide operating temperature, ranging from -40 °C to 120 °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 rows.

- High current rating up to 30 A per contact
- Solution for vertical & right-angle through hole
- TPA housings functional with or without TPA
- Provides secondary level locking feature
- 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
- TPA feature provides secondary locking feature
- Pre-plated terminal
- Glow wire compliant
- UL 94 V-0 flammability rated LCP material
- Halogen-free resin material
- RoHS compliant, UL rated, and lead-free

BENEFITS

- Rated up to 30 A per contact
- Ensures secured mating retention
- Well secured terminal in housing
- Terminal is located at the correct position 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 94 V-0
- Receptacle Housing: Nylon 66, Black & Natural, UL 94 V-0 & UL 94 V-2
- Crimping Terminal: High-conductivity Copper with optional Tin and Gold plating

MECHANICAL PERFORMANCE

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

ELECTRICAL PERFORMANCE

- Low Level Contact Resistance: 2 mΩ max. (Initial)
- Insulation Resistance: 1000 MΩ min.
- Voltage Rating: 600 V AC (RMS)/DC
- Current Rating: Up to 30 A/contact
- Dielectric Withstand Voltage : 2200 V AC

PACKAGING

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

APPROVALS & CERTIFICATION

- UL Approval: E66906
- TUV Approval: B171234414032

SPECIFICATIONS

- 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



EV BMS and Charger
Intelligent Transport System
Auto Drive Controller
GPS Tracker
Tail Lamp and Rear Light



Gaming GPU & PSU
White Goods
LED Signage
Next-generation Xbox
Vending Machine Appliances



Hot Plug Server
NVR Servers
Server – Fan Applications
Rack Servers
OCP DC-MHS
Baseband (Fan Unit)
Network Router & Switch
Networking Gateway



Energy Storage ESS
Warehouse Robotics
Industrial Control Units
Drives and Motors
Factory Automation
Industrial UPS /Inverters

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 (UL 94 V-0)	10158453
	TPA Receptacle Housing (UL 94 V-0)	10174854
	TPA (UL 94 V-0)	10174855
	Right-Angle Receptacle Housing & Back Cover	10176091
Terminals	Receptacle Terminal	10158070
	TPA Receptacle Terminal	10174856
	Right-angle Receptacle Terminal	10160960

Find part number details using the search box on www.amphenol-cs.com

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
10174856-1X1LF	14 AWG -16 AWG	TBD	TBD	TBD
10174856-1X2LF	12 AWG	TBD	TBD	TBD
10174856-1X3LF	10 AWG	TBD	TBD	TBD

HAND CRIMP TOOL

Terminal Part Number	AWG Range	Plating	Hand Crimp Tool Part Number
10158070-1XXLF	12 AWG	Gold/Tin	10160974-001
	14 AWG		
	16 AWG		
10174856-1X1LF	14 AWG -116 AWG	Gold/Tin	10192204-002
10174856-1X2LF	12 AWG		10192204-001
10174856-1X3LF	10 AWG		

EXPLORE THE PRODUCT DETAILS ONLINE

Scan Now ▶



BCSMINTK/PWR570-42/6EA4