

## Topflight Series

### CONNECTOR WITH UP TO 18.5 A/PIN WIRE-TO-BOARD APPLICATIONS

The Topflight series is a 3.0 × 5.7 mm pitch power connector that is designed for flexible wire-to-board configuration, used in power applications based on the different wire gauges and circuits. It can provide 18.5 A/pin maximum, and the wire gauge ranges from AWG# 13 to AWG# 16. It also has special foolproof measures to avoid the wrong insertion between different circuits. This series is available for power pin, 4 to 14 circuits for dual row. And this is a low-insertion-force terminal design, which can reduce the mating force when customers use more circuits.

- Supports up to 18.5 A per contact
- Available in 4P4S to 14P14S pins configuration
- Wire-to-board solution
- Isolated contact design ensures safety and prevents misconnection
- Optional board lock feature provides flexibility



#### FEATURES

- Compact power connector (current rating of 18.5 A/pin)
- Through-hole design
- Wire-to-board solution
- High-temperature LCP housing(available in 94 V-0)
- Standoff design
- Foolproof solution
- Fully isolated pins
- Cable side terminal soldering design

#### BENEFITS

- EIA and UL Yellow Card
- High current & better retention force on PCB design
- Better space utilization
- Meet safety standards
- Meets PIP requirement
- Ensures the header and receptacle or plug and receptacle cannot be mis-mated
- Protects contacts against potential damage during handling and mating
- AWG# 13 to AWG# 16 available

## TECHNICAL INFORMATION

### MATERIAL

- Housing: High-temperature thermoplastic, UL 94 V-0 compliant, Black
- Contact: Copper alloy, selective Gold plating on contact area; 100  $\mu$ m Tin plating on soldering tail; minimum 50  $\mu$ m Nickel underplating overall

### ELECTRICAL PERFORMANCE

- Current Rating: Maximum 18.5 A per contact
- Contact Resistance: 20 m $\Omega$  max.
- Voltage Rating: 250 V AC

### ENVIRONMENTAL

- Humidity: Contact resistance,  $\Delta R = +20$  m $\Omega$  max.
- Salt Spray: Contact resistance,  $\Delta R = +20$  m $\Omega$  max.
- Resistance to Soldering Heat: No evidence of physical damage
- Thermal Shock: No evidence of damage
- Contact Resistance:  $\Delta R = +20$  m $\Omega$  max.

### MECHANICAL PERFORMANCE

- Insertion Force: Power terminal 8 N max. per pin, Signal terminal 4 N max. per pin
- Extraction Force: Power terminal 2 min. per pin, Signal terminal 0.1 min. per pin
- Terminal Retention Force in Housing for Cable Assembly: 24.5 N min.

### SPECIFICATIONS

- Amphenol Specification: PS-07923

### APPROVALS AND CERTIFICATIONS

- EEIA: Compliant
- UL: Recognized (UL Yellow Card)

### PACKAGING

- Tray
- Tape & Reel

### TARGET MARKETS/APPLICATIONS



Communications



Consumer Switch



Server Data Center Storage




Industrial & Instrumentation

## PART NUMBERS

Description	Part Numbers
Topflight 3.0 mm $\times$ 5.70 mm pitch, header R/A DIP type	GPFLDXX0X0000HR
Topflight 3.0 mm $\times$ 5.70 mm pitch, header straight DIP type	GPFLDXX1X0011HR
Topflight 3.0 mm $\times$ 5.70 mm pitch, cable housing	GPFLDHXX031HR
Topflight power TPA	GT0800PA01XXXHR
Topflight signal TPA	GT0800PA02XXXHR
Topflight cable power terminal, AWG#14 & AWG#16	GPFLBCX232A1HR
Topflight cable power terminal, AWG # 26 & AWG# 28	GPFLACXX21C1HR

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

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