

Replaceable Battery Connectors

HIGH RELIABILITY AND DURABILITY BATTERY CONNECTORS FOR SMALL DEVICES

Amphenol FCI Basics Battery Connectors consist of spring and blade types, available in 2.0/2.5/3.0/3.6/4.6mm pitch, with 2 to 10 positions supporting up to 10A. These connectors have been widely adopted across applications like smart home devices, e-cigarettes, household appliances medical devices, rugged handhelds, and more.

These replaceable battery connectors meet new laws and requirements for more sustainable, circular, and safe batteries. Consumers will be able to remove and replace the portable batteries in their electronic products at any time of the life cycle. This will extend the life of these products before their final disposal, will encourage re-use, and will contribute to the reduction of post-consumer waste.

- Compact design to minimize PCB space
- Industry standard pitch to mate with regular battery types
- Reliable terminal design provides higher durability
- Various positions to allow design flexibility
- Surface Mount and Through-Hole termination styles
- Meeting international requirements on replaceable batteries



FEATURES

- Industry-standard pitch 2.0/2.5mm
- Various positions includes 2-10pins
- Higher conductivity Copper Alloy
- Optimized terminal structure
- SMT and TMT termination, and right-angle and vertical configurations
- Wide range of working heights
- RoHS compliant

BENEFITS

- Mate with common replaceable batteries
- Provides design flexibility
- Support higher current rating, from 1A to 10A
- Provides higher durability up to 5000 cycles
- Supports different building practices
- Provides higher contacting reliability
- Meets environmental requirements

▶ Replaceable Battery Connectors

TECHNICAL INFORMATION

MATERIAL

- Housing: High-temperature resistant thermoplastic, UL94-V0 rated, Black
- Terminal: Copper Alloy with Gold plating
- Hold down (if have): Stainless Steel with Tin plating

ELECTRICAL PERFORMANCE

- LLCR: <30mΩ
- Dielectric Withstanding Voltage: >250V RMS
- Insulation Resistance: >1000MΩ
- Current Rating: 1A to 10A (see product drawing)

MECHANICAL PERFORMANCE

- Durability:
 - >3000 cycles for spring contact
 - >2000 cycles for blade contact
- Mating Force: 9.8N max.

ENVIRONMENTAL

- RoHS compliant per EU directive 2011/65/EU and amendments

PACKAGING

- Tape and Reel

TARGET MARKETS/APPLICATIONS



E-Cigarette
Smart Home
PC/Tablet
Smart Devices



Server



Ruggedized Handheld



Medical Device

PART NUMBERS

| Description | Part Numbers |
|---|-------------------|
| 2.5mm Pitch Right Angle 3pos Gold Flash 0.70mm Working Height | 10176862-3000LF |
| 2.5mm Pitch Vertical Wire Termination 3pos Gold Flash 0.70mm Working Height | 10177564-3001LF |
| 2.5mm Pitch Vertical SMT 3pos 30μin Gold 1.10mm Working Height | 10008318-001LF |
| 2.5mm Pitch Right Angle 5pos Gold flash 0.80mm Working Height | 10174632-050000LF |
| 3.6mm Pitch Vertical 4pos 30μin Gold 1.25mm Working Height | 10120639-001LF |
| 3.6mm Pitch Vertical 5pos 30μin Gold 1.05mm Working Height | 10116040-001LF |
| 4.6mm Pitch Vertical 3pos 30μin Gold 1.00mm Working Height | 10116189-001LF |
| 2.0mm Pitch Right Angle Receptacle Gold Flash | 10174479-05A100LF |
| 2.0mm Pitch Vertical Header Gold Flash | 10174480-05A100LF |
| 2.0mm Pitch Right Angle Header Gold Flash | 10174481-05A100LF |
| 2.5mm Pitch SMT Receptacle Gold Flash | 10174522-050000LF |
| 2.5mm Pitch Through Hole Receptacle Gold Flash | 10174566-050000LF |
| 2.5mm Pitch Right Angle Header Gold Flash | 10174523-050000LF |
| 2.5mm Pitch Vertical Header Gold Flash | 10174587-050000LF |
| 3.0mm Pitch Right Angle Header 30μin GXT® | 10179680-10001LF |
| 3.0mm Pitch Right Angle Receptacle 30μin GXT® | 10179681-10001LF |

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