

Battery Connector for Cordless Power Tools/Vacuum Cleaner

CUSTOMIZABLE HIGH DURABILITY, HIGH CURRENT RATING, CORDLESS POWER TOOLS

The Power Tools Battery connector offers ideal power solution in terms of high current and high durability, better performance in terms of IP protection and overall connector life. The termination for the same can be optimized as per the working requirement. They can be ideally used for wire-to-wire, board-to-board and wire-to-board solutions for battery charging / discharging.

- RoHS compliant
- High temperature resistant housing
- Operating temperature range from -15°C to $+85^{\circ}\text{C}$
- Flexible termination styles
- Connector polarization



BENEFITS

- Connector combinations are available in the required termination
- Available in various pin combinations and sizes
- Customizable designs
- High durability/High current application
- IP Protection

Power Tools Battery Connector General Specification	
Operating Voltage	Up to 100VDC
Current Rating	Up to 45A
Operating temperature	-15°C to 80°C
IP Rating (Optional)	IPX4/X7
Durability	Up to 4000 Mating Cycles
Vibration	Sinusoidal/Random
Termination	BTB, WTB, WTW*

* Above stated specification is the common specification. However this can be upgraded / modified based on the Customer Requirement.

TECHNICAL INFORMATION

MATERIAL

- Housings: High temperature resistant thermoplastic, UL94V-0 rated
- Power Contacts: Special Copper Alloy with customizable plating

MECHANICAL PERFORMANCE

- Thermal Shock: EIA 364-32
- Mechanical Shock: Per EIA364-27, Condition H (11ms 30G)
- Humidity: Per EIC512-6 / EIA364-31
- Vibration: Per EIA364-28, Condition I
- Salt Spray: Per EIA364-26, 48Hrs
- Operating Temperature: -15°C to +85°C
- Operating Temperature:
 - Gaskets: -40°C to +50°C (EPDM Rubber)
 - 40°C to +150°C (Silicone Rubber)
- Temperature Rise: EIA364-70, 30°C T at 45A

ELECTRICAL PERFORMANCE

- Voltage: 100VDC
- Current Rating: Up to 45A
- Contact Resistance LLCR: $\Delta 2\text{m}\Omega$ max.
- Insulation Resistance: 500M Ω min. at 500VDC test voltage
- Dielectric Withstanding Voltage: 1000VAC at sea level

PACKAGING

- Tray /Bulk/ Tape & Reel

APPROVALS AND CERTIFICATIONS

- UL (Optional; Based on Customer Requirement only)

TARGET MARKETS/APPLICATIONS



Cordless Power Tools



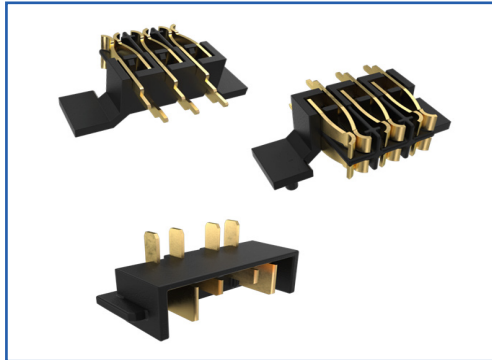
Vacuum Cleaners
Lawn Movers

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APPLICATIONS

Robust customized battery/charger connectors and terminal solutions, Cordless power tools, lawn mowers, Cordless vacuum cleaner and personal care devices.

- Available in various pin configurations and connector sizes with current ratings up to 45A. IP67 rated in both mated and unmated condition



Cordless & Robotic Vacuum Cleaners Applications



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