Lithium Polymer Battery Pack 250mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP502030

Designation IEC system: Lithium polymer battery pack

Length: 30 ± 0.4 mm Width: 20 ± 0.4 mm Thickness: 5.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 3.5g Connector: JST 2,54

Electrical Specification

Rated capacity: 250mAh min, 260mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 125mA, Rapid Charge: 250mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. Current: 5.0mA

Max continuous discharge current: 250mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 89mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume 2.9V \pm 100mV)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 450mAh 3.7V with Protection Circuit Module (PCM)

Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP502248

Designation IEC system: Lithium polymer battery pack

Length: 48 ± 0.4 mm Width: 22 ± 0.4 mm Thickness: 5.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 9.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 450mAh min, 470mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 225mA, Rapid Charge: 450mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. current: 9.0mA

Max continuous discharge current: 450mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 78mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume 2.9V \pm 100mV)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 600mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP403448

Designation IEC system: Lithium polymer battery pack

Length: 48 ± 0.4 mm Width: 34 ± 0.4 mm Thickness: 4.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 12.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 580mAh min, 600mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 300mA, Rapid Charge: 6000mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. Current: 12.0mA

Max continuous discharge current: 600mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 60mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 850mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP603048

Designation IEC system: Lithium polymer battery pack

Length: 48 ± 0.4 mm Width: 30 ± 0.4 mm Thickness: 6.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 18.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 850mAh min, 880mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 425mA, Rapid Charge: 850mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. Current: 17.0mA

Max continuous discharge current: 850mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 52mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 980mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP573450

Designation IEC system: Lithium polymer battery pack

Length: 50 ± 0.4 mm Width: 34 ± 0.4 mm Thickness: 5.7 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 19.5g Connector: JST 2,54

Electrical Specification

Rated capacity: 980mAh min, 1020mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 490mA, Rapid Charge: 980mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. current: 19.6mA

Max continuous discharge current: 980mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 25mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume 2.9V \pm 100mV)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 1350mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP503759

Designation IEC system: Lithium polymer battery pack

Length: 59 ± 0.4 mm Width: 37 ± 0.4 mm Thickness: 5.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 28.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 13550mAh min, 1380mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 675mA, Rapid Charge: 1350mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. Current: 27.0mA

Max continuous discharge current: 1350mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 47mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 1500mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP584070

Designation IEC system: Lithium polymer battery pack

Length: 70 ± 0.4 mm Width: 40 ± 0.4 mm Thickness: 5.8 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 30.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 1480mAh min, 1500mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 750mA, Rapid Charge: 1500mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. current: 9.0mA

Max continuous discharge current: 1500mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 78mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 2300mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP654365

Designation IEC system: Lithium polymer battery pack

Length: 65 ± 0.4 mm Width: 43 ± 0.4 mm Thickness: 6.5 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 40.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 2300mAh min, 2300mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 1350mA, Rapid Charge: 2300mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. current: 9.0mA

Max continuous discharge current: 2300mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 78mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety

Lithium Polymer Battery Pack 4000mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack

Mechanical Characteristics

Type number: LP7035138

Designation IEC system: Lithium polymer battery pack

Length: 138 ± 0.4 mm Width: 35 ± 0.4 mm Thickness: 7.0 ± 0.2 mm

Cable: 150 ± 3.0mm (26AWG UL 10 07)

Weight: appr. 75.0g Connector: JST 2,54

Electrical Specification

Rated capacity: 3980mAh min, 4000mAh typ.

Nominal voltage: 3.7V

Max. operating voltage range: 3.0V to 4.2V

Charge voltage: 4.2 ± 50mV

Initial charge current: Standard charge: 2000mA, Rapid Charge: 4000mA

Charging cut-off (A or B)

A) By time: Standard charge: 7 hours, Rapid charge: 4 hours

B) By min. Current: 80.0mA

Max continuous discharge current: 4000mA

Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)

Internal impedance (1kHz): approx 78mOhm

Cell protection

Overcharge detection: $4.325 \pm 25 \text{mV}$ (0.5 to 2.0 sec. delay, resume $4.075 \pm 50 \text{mV}$) Overdischarge detection: $3.00 \text{V} \pm 25 \text{mV}$ (6.25 to 250msec. delay, resume $2.9 \text{V} \pm 100 \text{mV}$)

Ambient conditions

Temperature range Charge: 0 to +45 C Discharge: -20 to +60 C Charge retention/Storage: 1 year at -20 to 20 C >70% 3 month at -20 to 45 C > 70% 1 month at -20 to 60°C > 70%

Safety