

PLCB36D3L8AAJA

Rechargeable Lithium-Ceramic Battery

Ultra-Safe

High Energy

Higher Space Usage Efficiency

Benefits

- Ultra-Safe and Good Heat-Dissipation.
- High Energy Density and Capacity.
 - By large foot-print battery cells and max. cell volume: 263% energy density of LMO.
- Modular cost decrease.
 - Save cooling system, thermal management and BMS.
- Operational Window -20°C~85°C.
- Higher Space Usage Efficiency. Able to be set in any possible place.

Key features

- Ultra-Safe.
 - No fire, no smoke and no leakage after physical impact.
 - Hazard Level 1~3 passed.
- High Energy Density.
 - 643Wh/L and 241Wh/Kg in 2018
 - 1073Wh/L and 380Wh/Kg in 2021
- High Stability (Storage)
 - Storage at 85°C/14 days, recovery > 98%, Swelling ratio <10%
 - Storage at 105°C/14 days. (@3,8V~4.0V)
 - Storage at -40°C/3 months, recovery > 98%. No salt out.
 - Storage at -65°C/1 month, recovery > 98%. No salt out.
- High Stability (Operation)
 - Able to be charged at 85°C
 - Able to be discharged at 90°C.
- Large Footprint (up to W:480 x L:1170 in 2018)

Main applications

- BEV/E-Bike
- Industrial / Rugged Tablet
- Medical Tablet, AIO PC
- High Safety Required Applications

Transportation and storage:

- Store in a dry place at a temperature preferably not exceeding 30°C.
- For long-term storage, keep the battery within a (30 ± 15) % state of charge.



Electrical characteristics

Nominal capacity	8300 mAh
Nominal voltage	3.75 V
Operating voltage	4.35~2.75V

Mechanical characteristics

Thickness (max)	3.7 mm
Width (max)	133.5
Length (max)	218.5
Typical weight	240 g

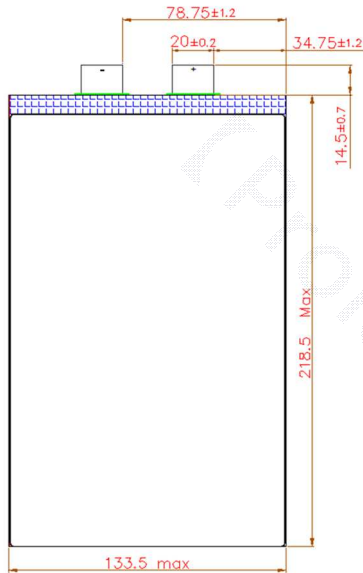
Operating conditions

Standard charge	CC-CV (Constant Current & Constant Voltage) Current 0.2CmA/ Voltage 4.4V Cut-off current: 0.05C
Max charge current	2C
Standard discharge	CC (Constant Current) Current 0.2CmA Cut-off voltage: 2.75V
Max discharge current	2C
Operation window	- 20°C to + 60°C
Cycle Life (recommend)	SOC80% (4.2V) to DOD95% (3.3V)

* Consult ProLogium for optimized charging below -20°C

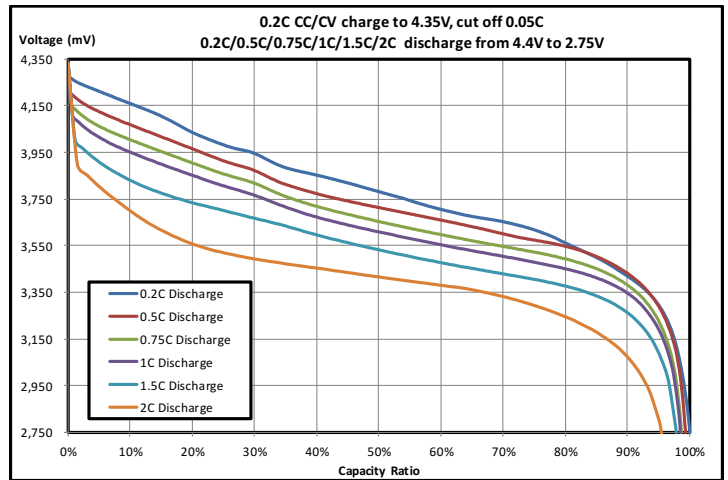
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2D Drawing

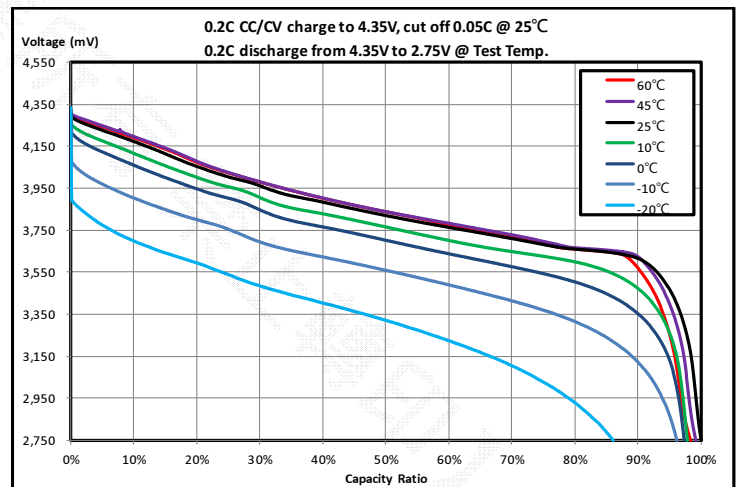


Unit: mm
 Tolerances : ±0.5mm

Discharge profiles (0.2/0.5/0.75/1/1.5/2C rate)



Operation Temperature Test (-20°C to +60°C)

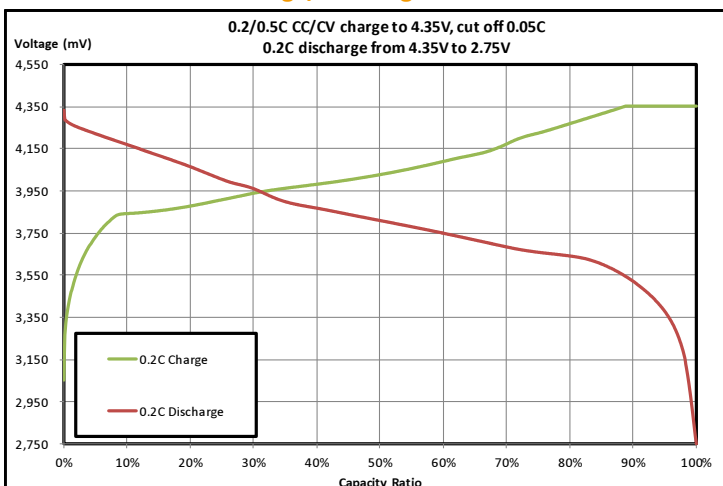


When handling ProLogium batteries:

- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of $\geq 60^\circ\text{C}$.
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and - terminals with metal.
- Do not charge beyond the condition which described on the delivery specification.
- Do not inverse charge.

Typical characteristics:

Charge/Discharge Profile



Cycle Life Test

