

# 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.
- Modular cost decrease.
  - Simplified cooling system, thermal management and BMS.
- Wide Operational Window -20°C~60°C.
- Long Cycle Life
- Higher Space Usage Efficiency. Able to be set in any possible place.
- Fast Charge Capability.

### Key features

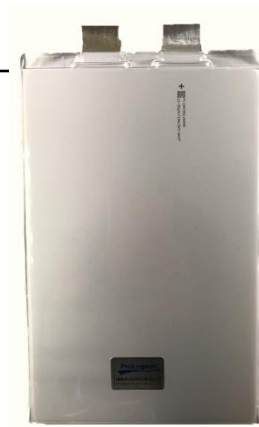
- Ultra-Safe.
  - No fire, no smoke and no leakage after physical impact.
  - Hazard Level 1~3 passed.
- High Energy Density.
  - 600Wh/L and 240Wh/Kg in 2019
  - 816Wh/L and 310Wh/Kg in 2022
- High Stability (Storage)
  - Storage at 85°C/14 days, recovery > 98%, Swelling ratio <10%
  - Storage at 105°C/14 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.
  - Able to be charged at -30°C
  - Able to be discharged at -40°C
- Long Cycle Life: 1500<sup>th</sup> >80%
- Fast Charge Capability: 2C CC/CV >80%

### 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	8900 mAh
Nominal voltage	3.85 V
Operating voltage	4.35~2.75V
Energy Density	350 Wh/L

### Mechanical characteristics

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

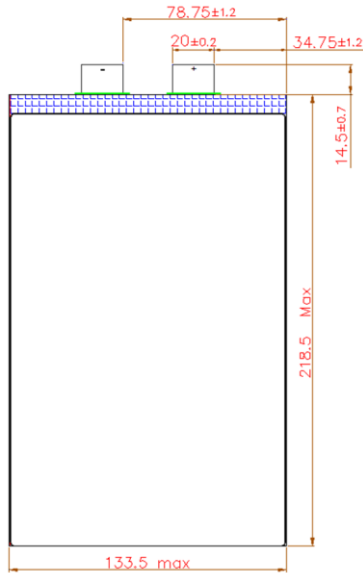
### Operating conditions

Standard charge	CC-CV (Constant Current & Constant Voltage) Current 0.2CmA/ Voltage 4.35V Cut-off current: 0.05C
Max charge current	1C
Standard discharge	CC (Constant Current) Current 0.2CmA Cut-off voltage: 2.75V
Max discharge current	1C
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



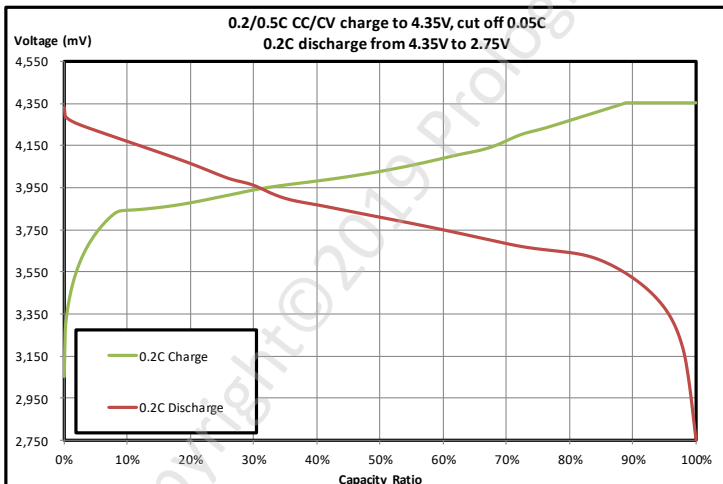
Unit: mm  
Tolerances : ±0.5mm

### When handling ProLogium batteries:

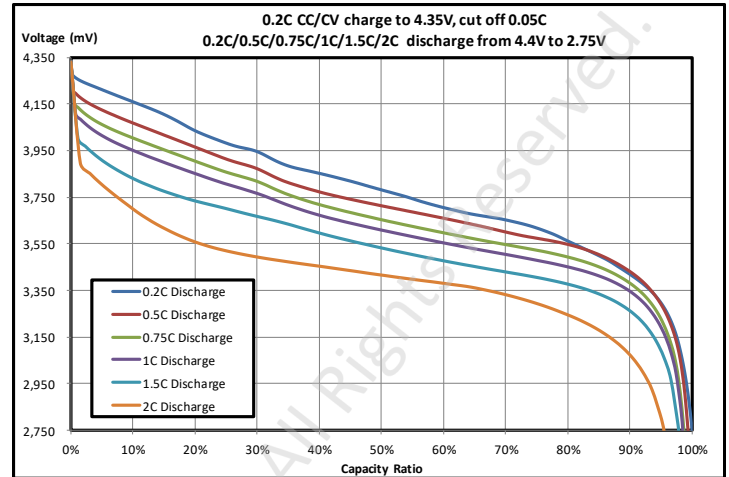
- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of ≥60°C.
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and – terminals with metal.
- Do not charge beyond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

### Typical characteristics:

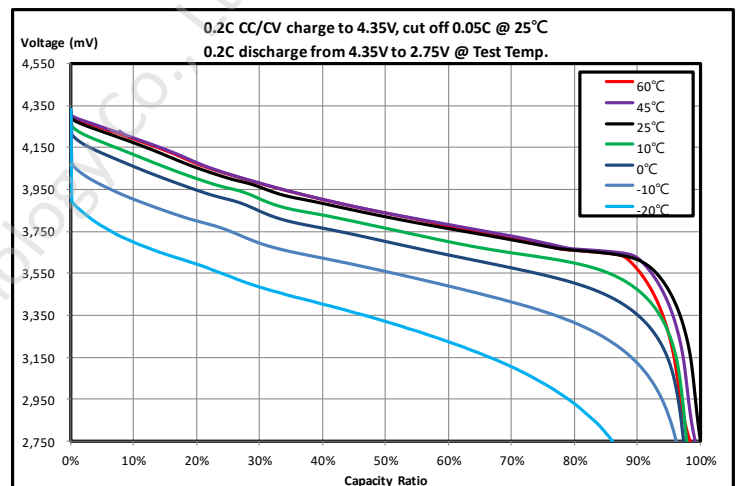
#### Charge/Discharge Profile



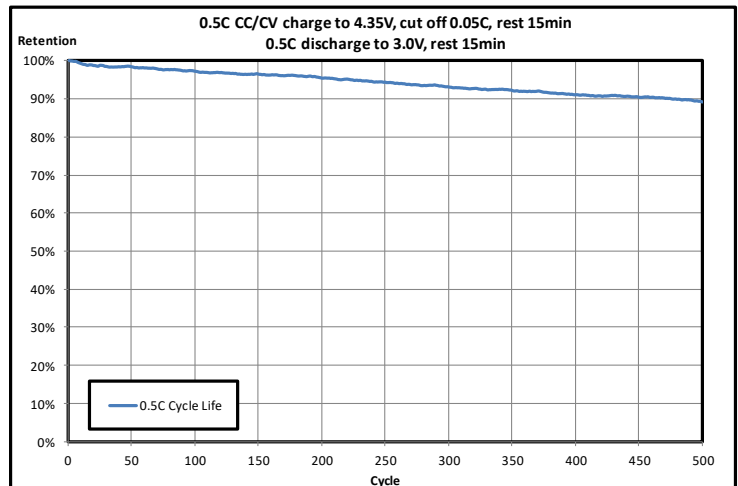
#### Discharge profiles (0.2/0.5/0.75/1/1.5/2C rate)



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



#### Cycle Life Test



\*charge/discharge/cycle tests criteria: @room temp. ( 25°C )