

PLCB049052069AAOA

Rechargeable Lithium-Ceramic Battery

Pouch PACKAGE

Fundamentally Safe

Extreme Temperature Endurance

Fast Charge Capability

Longer Shelf Life



Benefits/Features

- Fundamentally Safe
No fire, no smoke and no leakage after physical impact
- Extreme Temperature Endurance
-30 - 85°C
- Fast Charge Capability
- Longer Shelf Life
at 85°C/75 days, recovery > 80%
at -40°C/3 months, recovery > 98%
at -65°C/1 month, recovery > 98%

Compliance

- UN38.3
- IEC62133-2: 2017
- UL1642 (MH48301)

Main applications

- Auto parts: Car radio, T-box
- Rugged: Laptop
- Anti-explosion: Remote controller
- Avionics: Emergency lighting, In-flight display
- Portable: ESS device

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	1160 mAh
Nominal voltage	3.75 V
Operating voltage	4.35 - 2.75V
Energy Density	114 Wh/kg

Mechanical characteristics

Thickness (max)	5.25mm
Width	52 mm
Length	69 mm
Total length	75 mm (include tabs)
Typical weight	38 g

Operating conditions

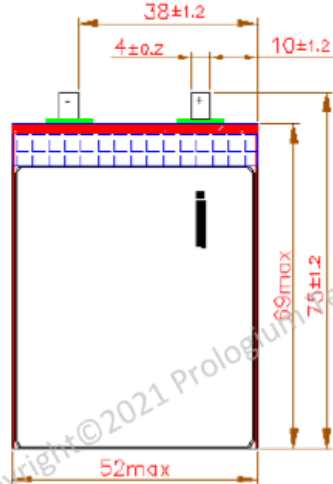
Standard charge	CC-CV (Constant Current & Constant Voltage) Current 0.2CmA/ Voltage 4.35V Cut-off current: 0.05C
Max charge current*	1C mA (continuous)
Standard discharge	CC (Constant Current) Current 0.2CmA, Cut-off voltage: 2.75V
Max discharge current*	2C mA (continuous)
Operation window**	-30°C to +85°C
Storage temperature range	-65°C to +115°C

* Consult ProLogium for increasing charging/discharging current.

** Consult ProLogium for optimized charging below -30°C or higher than 85°C

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2D Drawing.



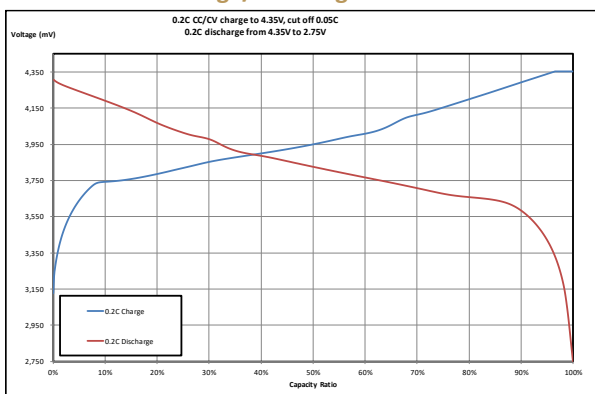
Unit: mm
Tolerances : ±0.5mm

When handling ProLogium batteries:

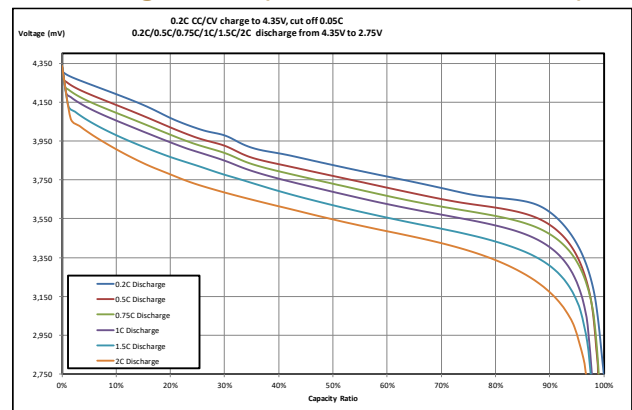
- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of $\geq 60^{\circ}\text{C}$.
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and - terminals with metal.
-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

Typical characteristics:

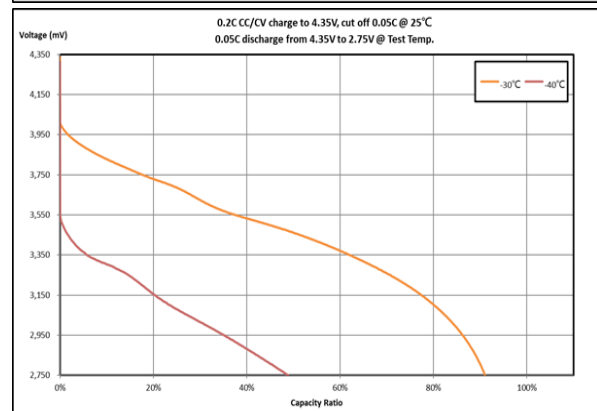
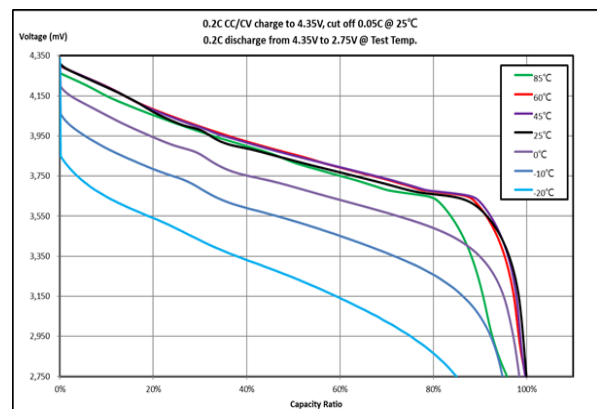
Charge/Discharge Profile



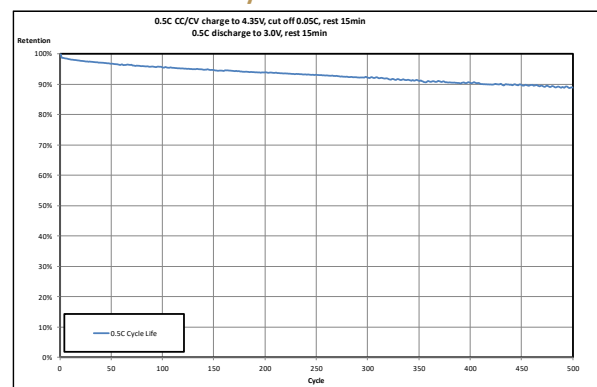
Discharge Profiles (0.2/0.5/0.75/1/1.5/2C Rate)



Operation Temperature Test (-40°C to +85°C)



Cycle Life Test



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