

FLCB046046AAAA

Rechargeable Lithium-Ceramic Battery

Ultra-safe
Ultra-thin
Flexible



Benefits

- Ultra-Safe.
 - No fire, no smoke and no leakage after physical impact.
- Ultra-thin: fit ISO card, tag and tracking application
- Flexible: after thousands times dynamic bending <2% swelling.
- Alignment marks for automatic process
- High Stability: stable performance at high / low pressure environment

Key Features

- Pass UL, IEC safety certification
- Thickness of single cell is only 0.43mm
- Pass ISO card 7816/7810 bending test.
- Able to print alignment marks on cell, helps card maker to do automatic manufacturing process
- Extreme vacuum (0.0016psia) / Extreme high loading pressure (711psia, 48atm)

Main Applications

- ISO cards: Smart BLE card
- Logistics tags: tracking tags

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	45 mAh
Nominal voltage	3.75 V
Operating voltage	4.35~2.75V

Mechanical Characteristics

Thickness (max)	0.43 mm
Width	46mm
Length	50 mm
Typical weight	1.6 g

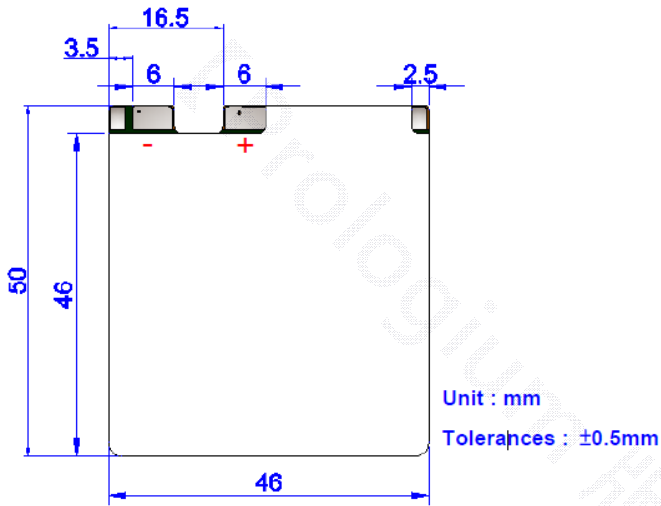
Operating Conditions

Standard charge	CC-CV (Constant Current & Constant Voltage) Current 0.2CmA/ Voltage 4.35V Cut-off current: 0.05C
Max charge current	0.5CmA
Standard discharge	CC (Constant Current) Current 0.2CmA Cut-off voltage: 2.75V
Max discharge current	1.0CmA
Operation window	- 20°C to + 60°C

* Consult ProLogium for optimized charging below -20°C

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2D Drawing

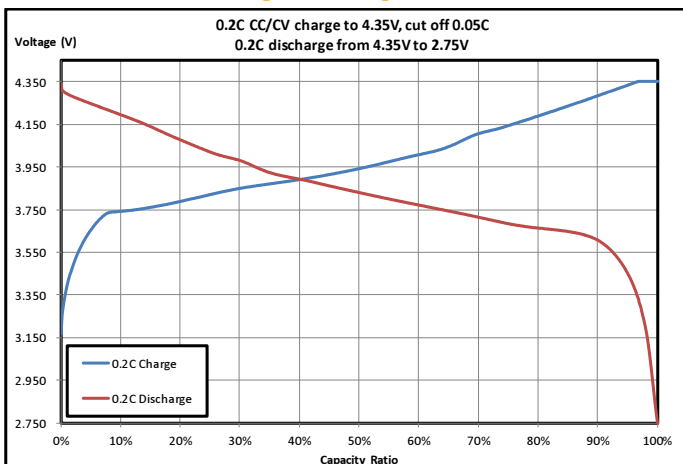


When handling ProLogium batteries:

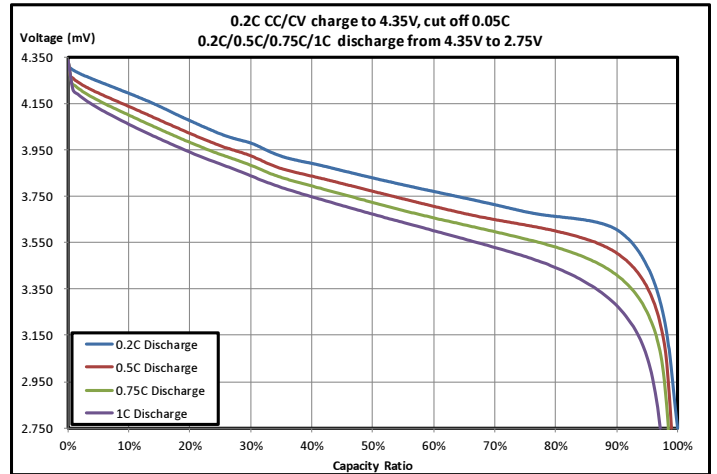
- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of $\geq 60^{\circ}\text{C}$.
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and - terminals with metal.
-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

Typical characteristics:

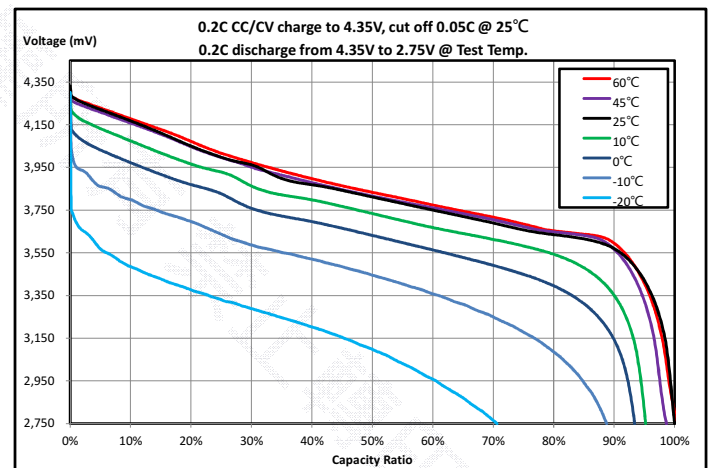
Charge/Discharge Profile



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



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



Cycle Life Test

