

FLCB020100AAAA

Rechargeable Lithium-Ceramic Battery

Ultra-safe
Ultra-thin
Flexible



Benefits

- Ultra-Thin: fit for Wristband application
- Ultra-Safe: solid-state battery, no leakage, No fire, no smoke and no leakage after physical impact, even cells cutting
- Flexible: dynamic with R25~50mm bending <2% swelling.
- Design Flexibility: able to multiple layer stacking to increase capacity

Key Features

- Pass UL, IEC safety certification
- Thickness of single cell is only 0.43mm
- After Bending Radius R25~50mm, Capacity >70%

Main Applications

- Wristband 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	30 mAh
Nominal voltage	3.75 V
Operating voltage	4.35~2.75V
Energy Density	148 Wh/L

Mechanical Characteristics

Thickness (max)	0.43 mm
Width	20 mm
Length	100 mm
Typical weight	1.5 g

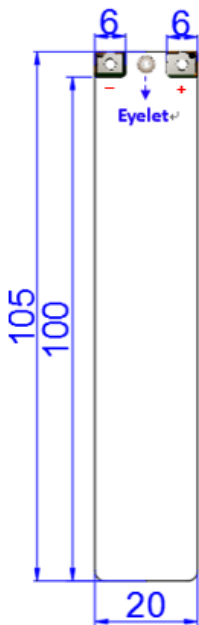
Operating Conditions

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

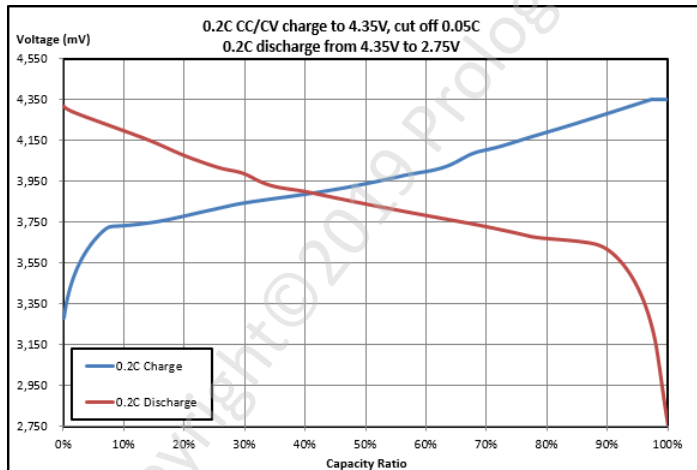


When handling ProLogium batteries:

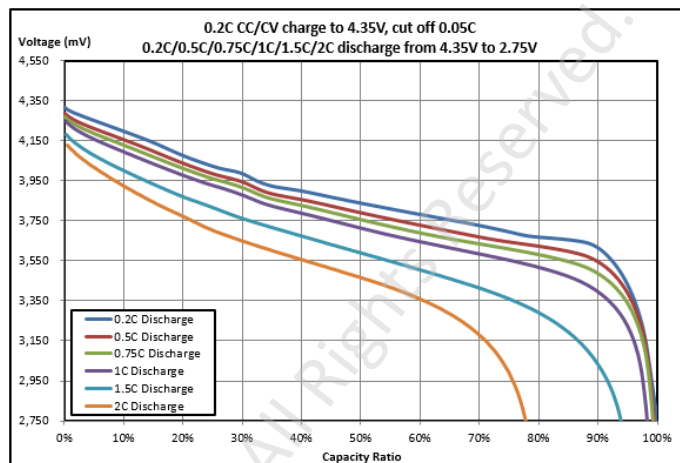
- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of $\geq 60^{\circ}\text{C}$.
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and - terminals with metal.
-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

Typical Characteristics:

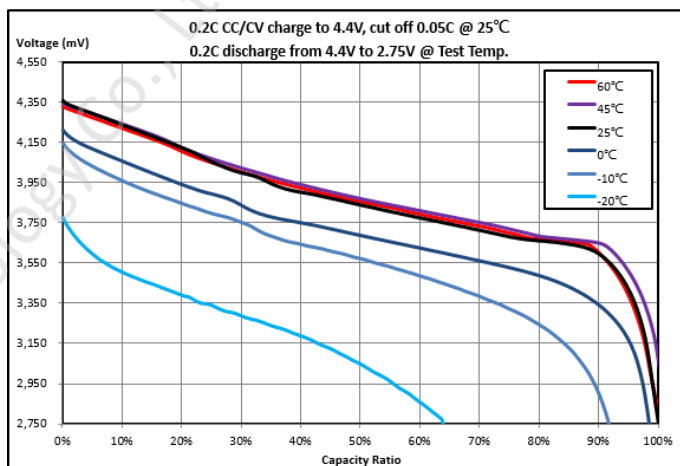
Charge/Discharge Profile



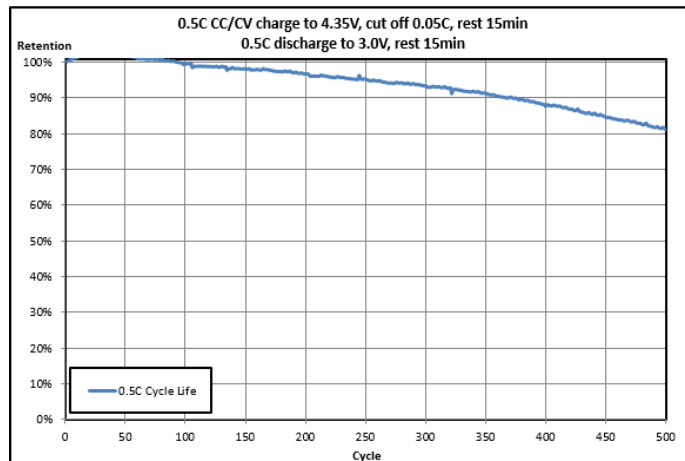
Discharge Profiles (0.2/0.5/0.75/1/1.5/2C Rate)



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



Cycle Life Test



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