

## FLCB027038AAAA

### 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 in ISO card, tag, and thin temp sensor 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 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, fingerprint card,
- Logistics tags: tracking tags
- Small medical devices: temp sensors

#### 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	15 mAh
Nominal voltage	3.7 V
Operating voltage	4.2~2.75V

#### Mechanical Characteristics

Thickness (max)	0.43 mm
Width	27 mm
Length	42.5 mm
Typical weight	0.8 g

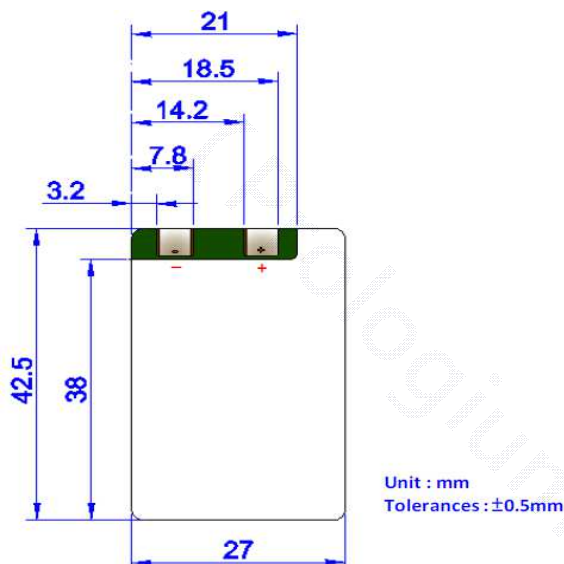
#### Operating Conditions

Standard charge	CC-CV (Constant Current & Constant Voltage) Current 0.2CmA/ Voltage 4.2V 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

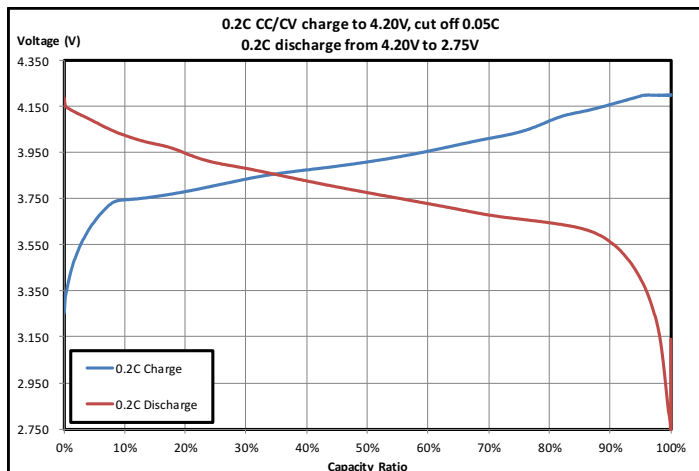


### When handling ProLogium batteries:

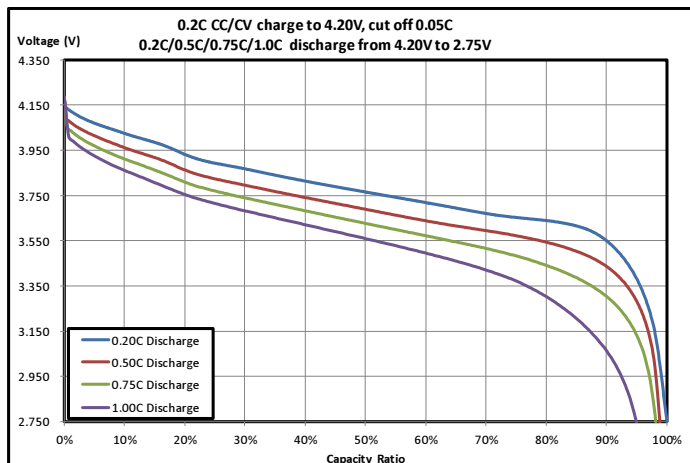
- Do not throw the battery into fire, nor heat.
- Do not disassemble nor modify.
- Do not leave in a place of  $\geq 60^{\circ}\text{C}$ .
- Prevent from water or moisture.
- Do not add strong shock, nor drop.
- Do not solder lead directly to battery body.
- Do not short + and - terminals with metal.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

### Typical Characteristics:

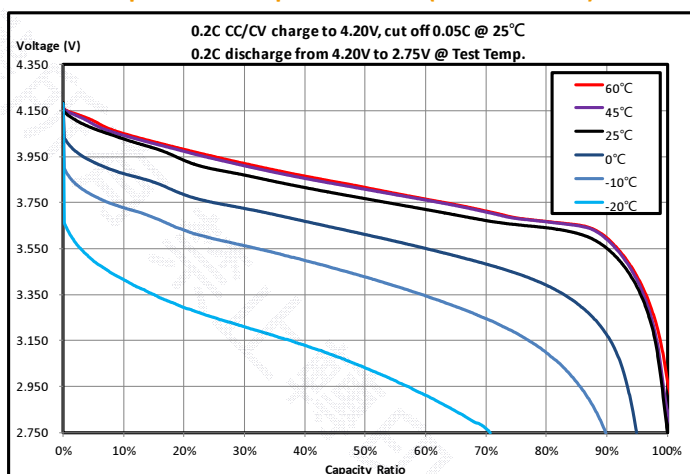
#### Charge/Discharge Profile



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



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



#### Cycle Life Test

