

### Features & Benefits

- A small and slim pin-shaped Lithium-ion battery which expands design options for micro devices.
- A high-strength metal exterior case provides excellent reliability.
- Rapid charging makes your portable devices more user-friendly.

### Specifications

Part number		CG-420A
Maximum charging voltage		4.35V
Nominal Voltage		3.8V
Typical Capacity		23.0mAh
Rated Capacity		22.0mAh
Dimensions*	Diameter(Max.)	4.7mm
	Height(Max.)	20.0mm
Weight*		Approx. 0.8g
Operating Temperature	Charge	0°C to +60°C
	Discharge	-20°C to +60°C
Maximum charging current		66.0mA(3C)

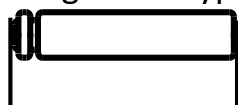
\* Without tabs.

\* Panasonic offers batteries with tabs or lead wires.

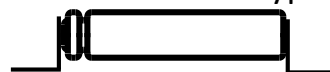
For more information, please ask Panasonic sales person.

### Terminal types

Through-hole type



Surface mount type



\* All models have stainless steel tab with tin (Sn) plating.

### Applications



As of November, 2019. The contents of this product information are subject to change without notice.

Please visit our website at:

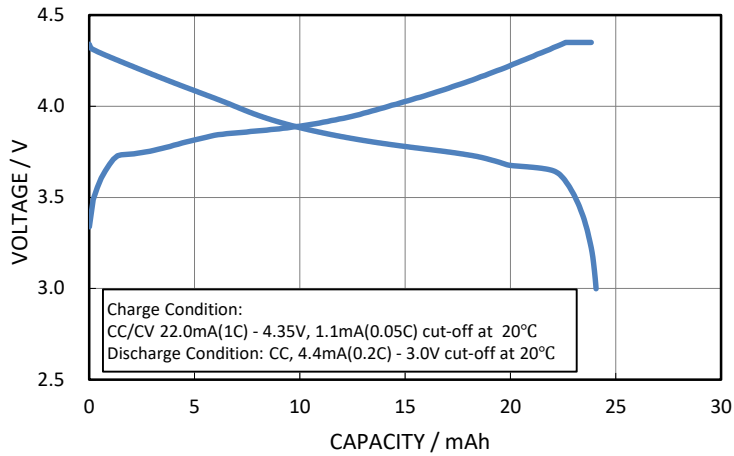
Panasonic Corporation

<https://industrial.panasonic.com/ww/products/batteries/secondary-batteries/pin-li-ion>

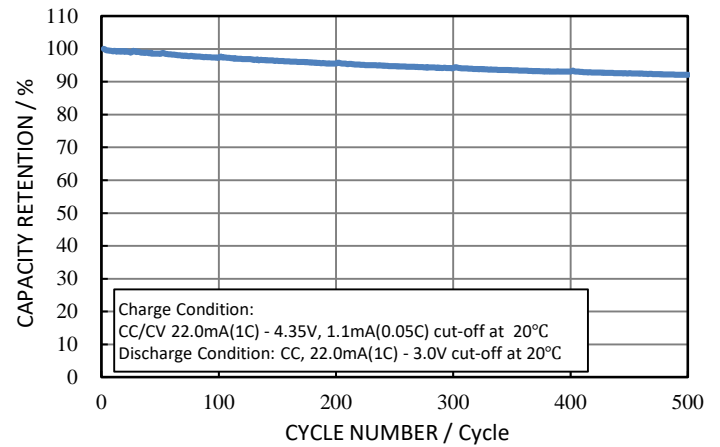


# Battery Characteristics

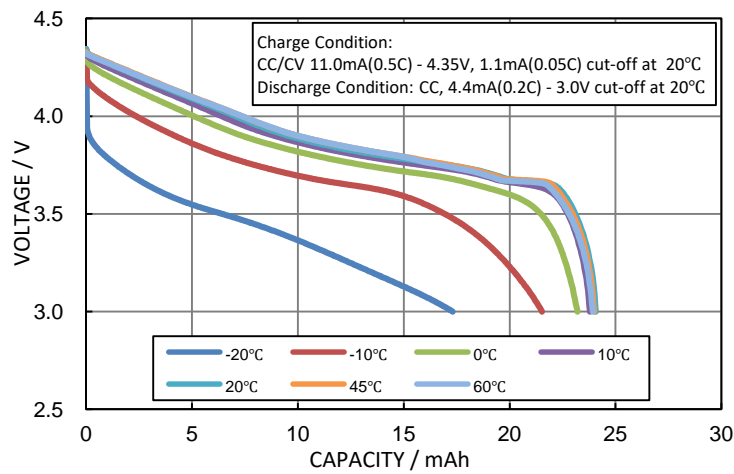
### Charge and Discharge Characteristics



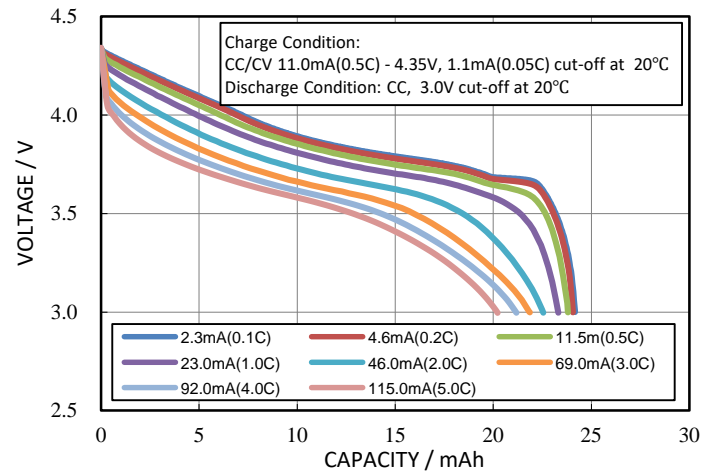
### Cycle Life Characteristics



### Discharge Characteristics by Temperature



### Discharge Characteristics by Rate of Discharge



This data in this document is for descriptive purposes only and is not intended to make or imply any guarantee or warranty.

## Handling Guidelines

### 1. Standard Voltage Range is 3.0 - 4.35V. Protection required for over-charge/over-discharge.

Standard Voltage Range	3.0~4.35V
Do not over-charge	Stop charging at $4.45 \pm 0.05V$
	Allow charging again at less than $4.25 \pm 0.05V$
Do not over-discharge	Stop discharge at $2.7 \pm 0.1V$
	Allow discharging again at more than $3.3 \pm 0.1V$
Over Current Protection	Stop discharge in the case of an out-put connection short circuit.

### 2. In order to prevent accidental ingestion of the battery, it must be inaccessible to the individual user / customer.

The battery will be shipped with lead wires or tabs.  
Please attach the battery to the device.

Please feel free to ask a Panasonic sales person.