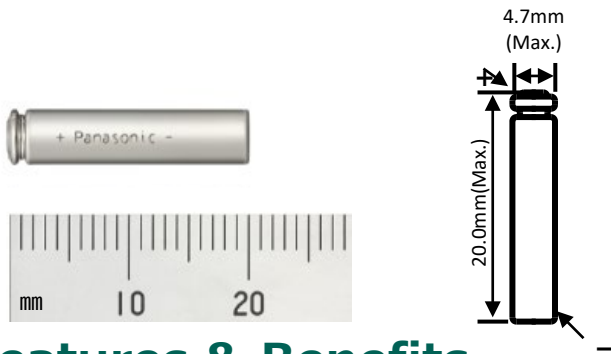


CG-420A

Pin-type Lithium-ion Battery



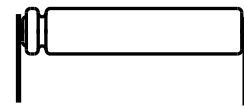
Features & Benefits

- 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.

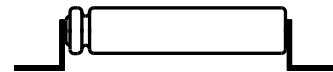
Terminal types

Panasonic offers batteries with tabs.
All models have stainless steel tab with tin (Sn) plating.

Through-hole type



Surface mount type



Applications

Hearing aids, small medical devices, wireless earphones, stylus pens, smart glasses, wristband devices and others.

Specifications

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 continuous discharging current		44.0mA(2C)
Maximum charging current		66.0mA(3C)
Certifications		IEC62133, UL1642

* Without tabs.

Panasonic Energy Co., Ltd.

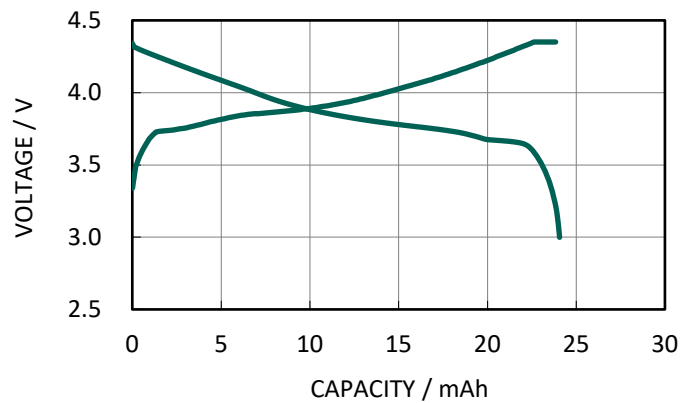
<https://industrial.panasonic.com/ww/products/pt/pin-li-ion>

As of April, 2022. This data in this document is for descriptive purposes only and is not intended to make or imply any guarantee or warranty. The contents of this product information are subject to change without notice.



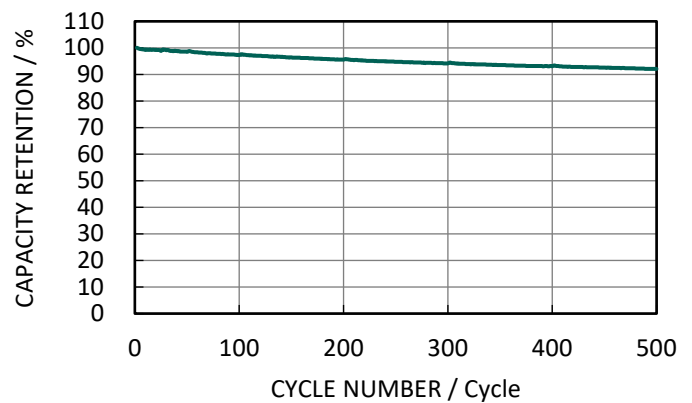
Characteristics

Charge and Discharge Characteristics



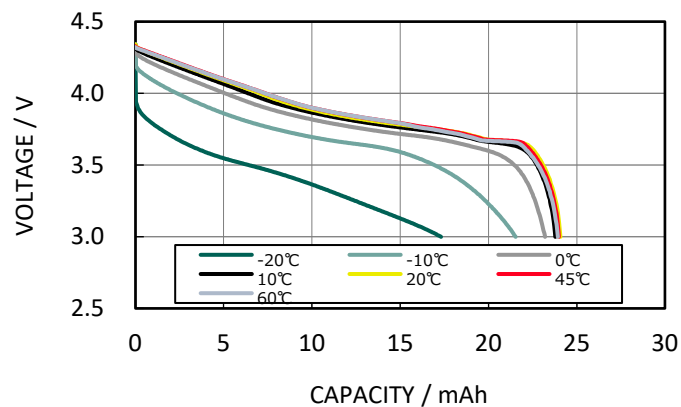
Charge Condition: CC/CV 22.0mA(1C) - 4.35V, 1.1mA(0.05C) cut-off at 20°C
Discharge Condition: CC, 4.4mA(0.2C) - 3.0V cut-off at 20°C

Cycle Life Characteristics



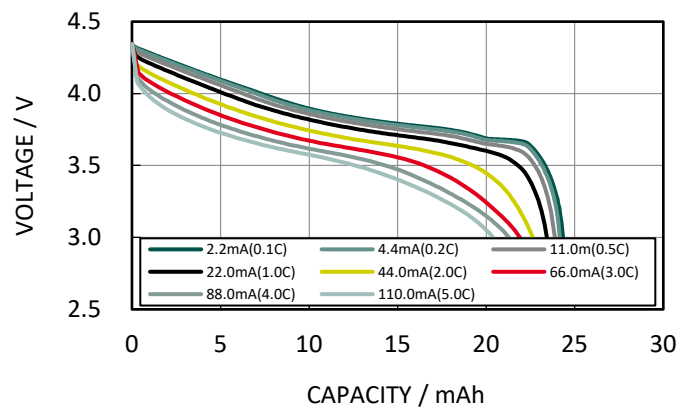
Charge Condition: CC/CV 22.0mA(1C) - 4.35V, 1.1mA(0.05C) cut-off at 20°C
Discharge Condition: CC, 22.0mA(1C) - 3.0V cut-off at 20°C

Discharge Characteristics by Temperature



Charge Condition: CC/CV 11.0mA(0.5C) - 4.35V, 1.1mA(0.05C) cut-off at 20°C
Discharge Condition: CC, 4.4mA(0.2C) - 3.0V cut-off at 20°C

Discharge Characteristics by Rate of Discharge



Charge Condition: CC/CV 11.0mA(0.5C) - 4.35V, 1.1mA(0.05C) cut-off at 20°C
Discharge Condition: CC, 3.0V cut-off at 20°C

Handling Guidelines

1. Standard Voltage Range is 3.0 - 4.35V. Protection required for over-charge/over-discharge.
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 tabs. Please attach the battery to the device.

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.

