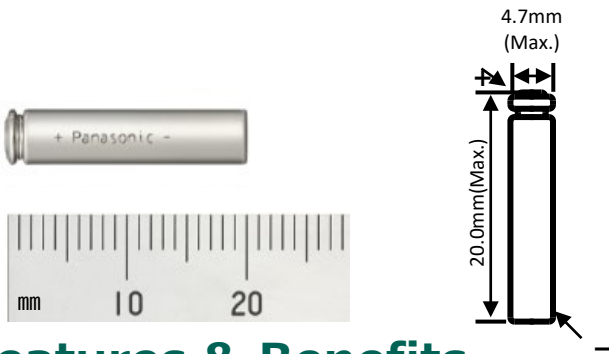


## CG-420B

## Pin-type Lithium-ion Battery



## Features &amp; Benefits

- Small and slim pin-shaped Lithium-ion battery which expands design options for micro devices.
- A rechargeable battery that can be used repeatedly and has the output capability required for Near Field Communications.
- A high-strength metal exterior case provides excellent reliability.

## Applications

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

## Specifications

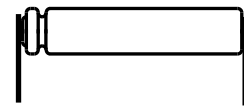
Maximum charging voltage		4.35V
Nominal Voltage		3.8V
Typical Capacity		29.0mAh
Rated Capacity		27.0mAh
Dimensions*	Diameter(Max.)	4.7mm
	Height(Max.)	20.0mm
Weight*		Approx. 0.9g
Operating Temperature	Charge	0°C ~ +60°C
	Discharge	-20°C ~ +60°C
Maximum continuous discharging current		54.0mA(2C)
Maximum charging current		20.2mA(0.75C)
Certifications		IEC62133, UL1642

\* Without tabs.

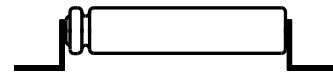
## Terminal types

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

Through-hole type

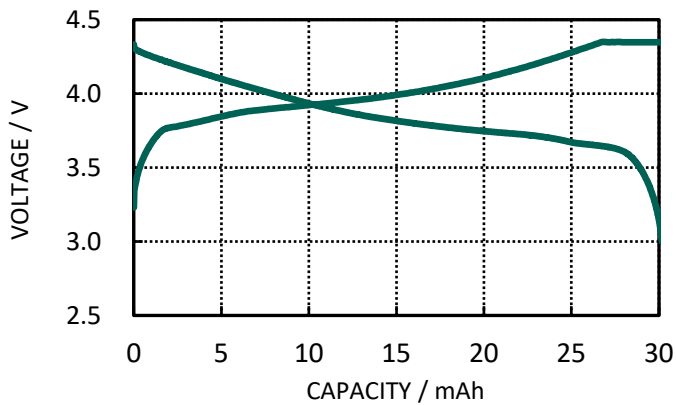


Surface mount type



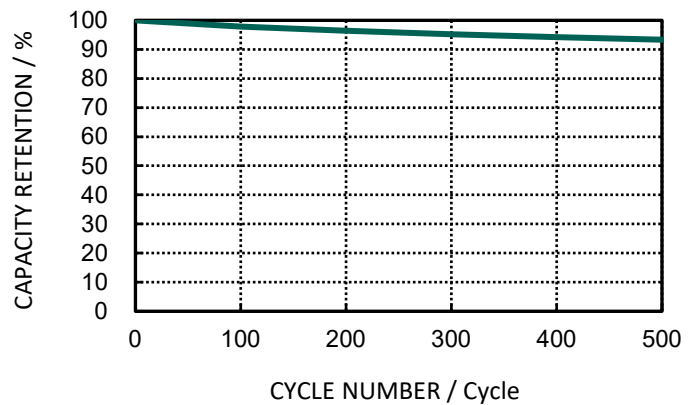
## Characteristics

### Charge and Discharge Characteristics



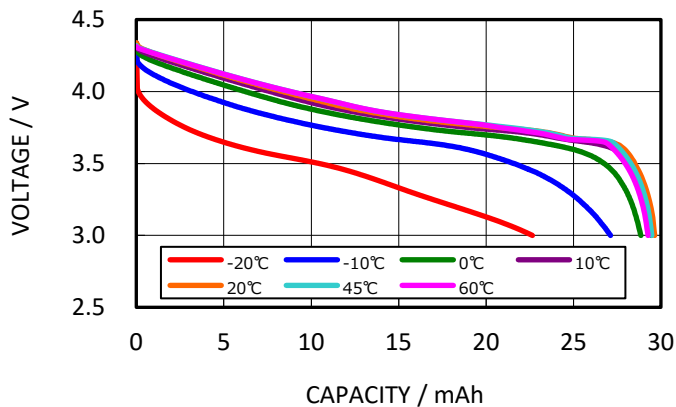
Charge Condition: CC/C20.2mA(0.75C) - 4.35V, 1.35mA(0.05C) cut-off at 20°C  
 Discharge Condition: CC, 5.4mA(0.2C) - 3.0V cut-off at 20°C

### Cycle Life Characteristics



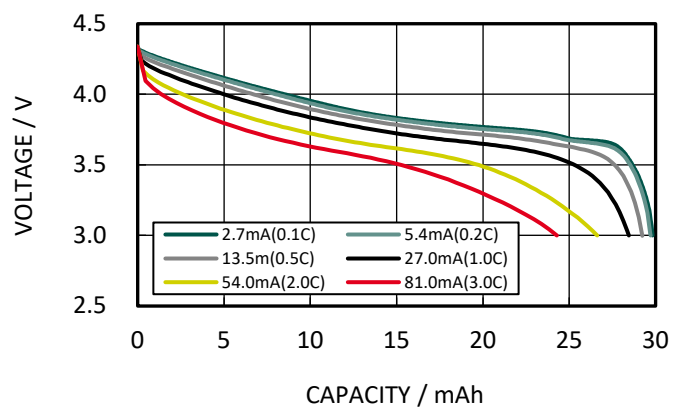
Charge Condition: CC/CV 20.3mA(0.75C) - 4.35V, 1.35mA(0.05C) cut-off at 20°C  
 Discharge Condition: CC, 20.3mA(0.75C) - 3.0V cut-off at 20°C

### Discharge Characteristics by Temperature



Charge Condition: CC/CV 27.0mA(0.05C) - 4.35V, 1.35mA(0.05C) cut-off at 20°C  
 Discharge Condition: CC, 5.4mA(0.2C) - 3.0V cut-off at 20°C

### Discharge Characteristics by Rate of Discharge



Charge Condition: CC/CV 27.0mA(1C) - 4.35V, 1.35mA(0.05C) cut-off at 20°C  
 Discharge Condition: CC, 3.0V cut-off at 20°C

## Handling Guidelines

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

