

## Features & Benefits

- A 3.6mm diameter 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.

## Specifications

Part number		CG-320A
Maximum charge voltage		4.35V
Nominal Voltage		3.8V
Typical Capacity*		15.0mAh
Rated Capacity		15.0mAh
Dimensions	Diameter(Max.)	3.65mm
	Height(Max.)	20.0mm
Weight (without tabs)		Approx. 0.5g
Operating Temperature	Charge	0°C to +60°C
	Discharge	-20°C to +60°C
Maximum charge current		11.2mA(0.75C)

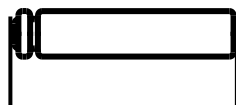
\* When the battery is discharged at 3.0mA(0.2C). Typical capacity becomes 13mAh when charge voltage is 4.2V.

\*\* Certified by UL1642 and IEC62133.

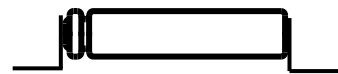
\* Panasonic offers batteries with tabs or lead wires.  
For more information, please ask Panasonic sales person.

## Terminal types

Through-hole type



Surface mount type



## Applications

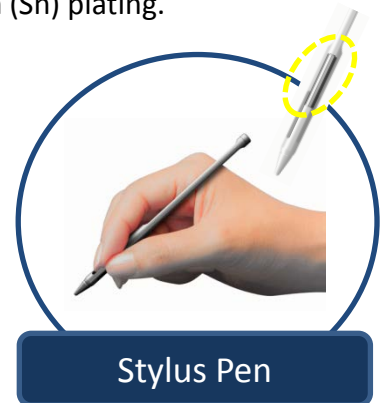
\* All models have stainless steel tab with tin (Sn) plating.



Smart Glasses



Wristband Device



Stylus Pen

As of December, 2017. The contents of this product information are subject to change without notice.

Please visit our website at:

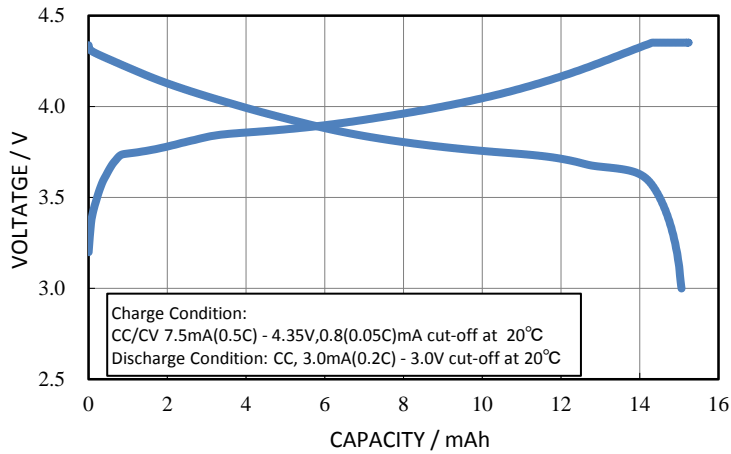
Panasonic Corporation, Automotive & Industrial Systems Company,  
Energy Device Business Division

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

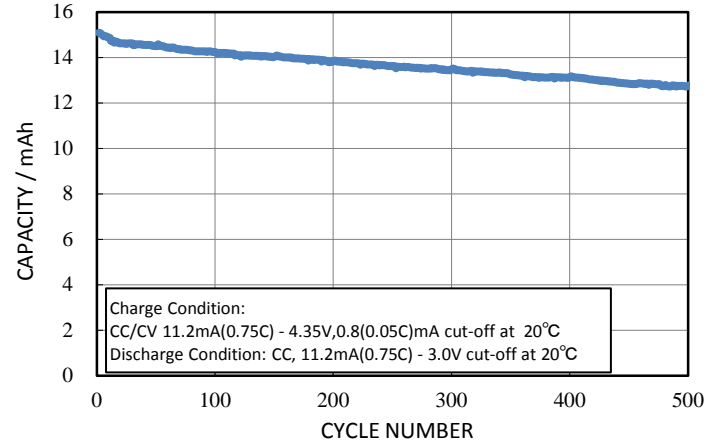


# Battery Characteristics

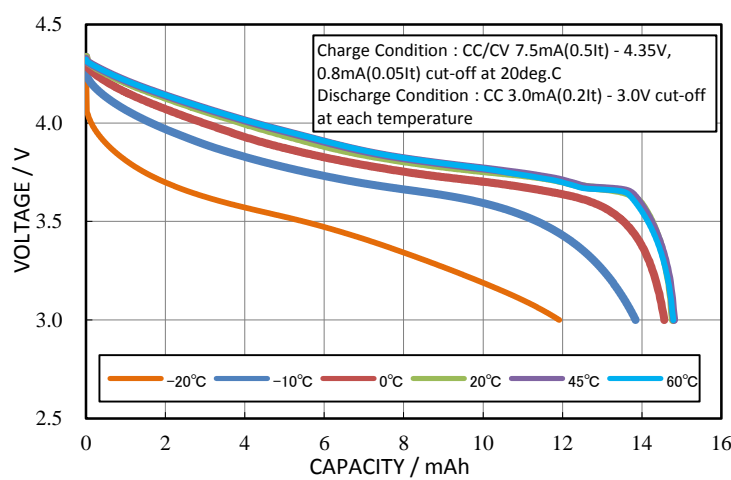
## Charge and Discharge Characteristics



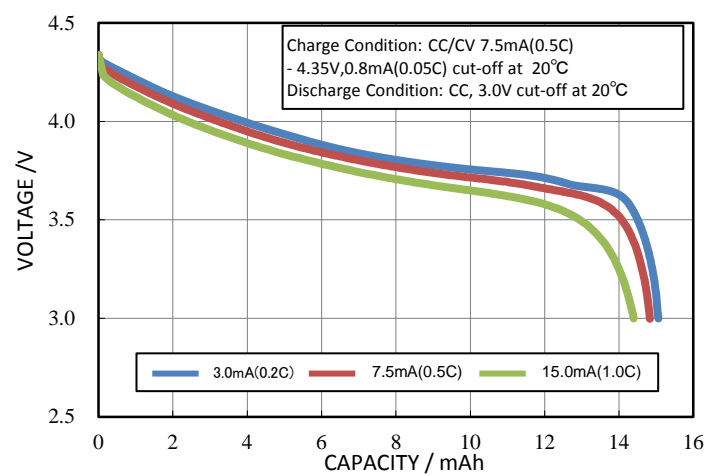
## Cycle Life Characteristics



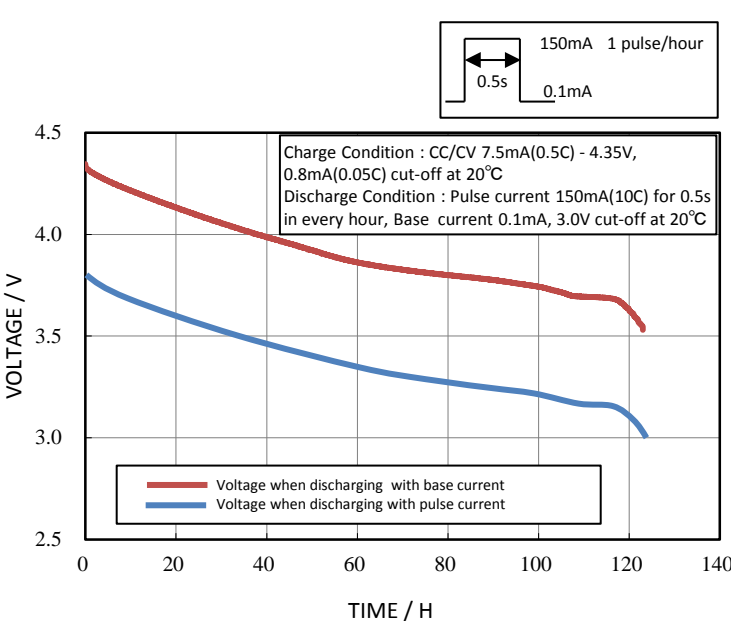
## Discharge Characteristics by Temperature



## Discharge Characteristics by Rate of Discharge



## Pulse Discharging Characteristics



## 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.

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

Please feel free to ask a Panasonic sales person.