



NOV-11

### Features

High-power lithium-ion rechargeable battery developed by Maxell. Small and lightweight, the lithium-ion rechargeable battery's applications will be expanded to include high-power applications.

#### Large current discharge

Newly developed electrode materials and structure have achieved large current discharge. High-power type (PB series) batteries are suitable for power tools and so on.

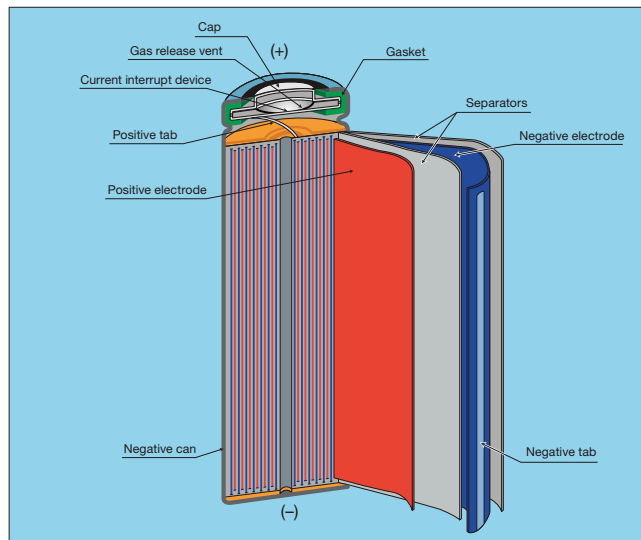
#### Stable discharge from -20 deg. C to 60 deg. C

High-power cylindrical lithium-ion rechargeable batteries provide stable discharge within a wide range of temperatures, between -20 deg. C and 60 deg. C. High-capacity type (PD series) batteries with improved discharge characteristic in the range between -20 deg. C and 0 deg. C are suitable for radios and mobile devices.

### Applications

- High-power type (PB series)  
Power tools, cordless home appliances, etc.
- High-capacity type (PD series)  
Wireless radios, handheld mobile terminals, camcorders, etc.

### Cell Structure



### Products

Model		INR18650PB1	INR18650PB2	INR18650PB2G	ICR18650PD
Dimensions*1 (mm)	Diameter	18.3±0.2	18.3±0.2	18.3±0.2	18.3±0.2
	Height	64.95+0.15/-0.30	64.95+0.15/-0.30	64.95+0.15/-0.30	64.95+0.15/-0.30
Weight*2 (g)		41	41	41	46
Charge (CCCV)	Max. voltage (V)	4.2	4.2	4.2	4.2
	Max. current (A)	4.0	4.0	4.0	2.25
Discharge (CC)	End voltage (V)	2.50	2.50	2.50	2.75
	Max. current*3 (A)	15	25	30	6
Nominal voltage (V)		3.7	3.7	3.7	3.7
Minimum capacity (mAh)		1450 <sup>4</sup>	1450 <sup>4</sup>	1450 <sup>4</sup>	2250 <sup>5</sup>
Note		High-power type			High-capacity type

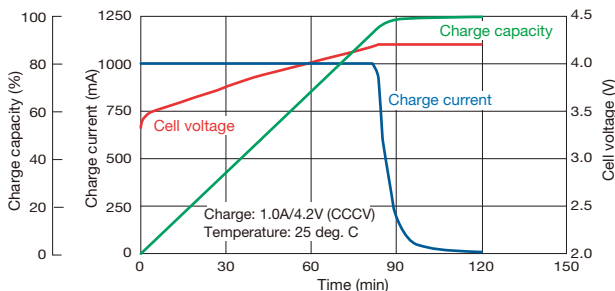
\*1 Dimensions of fresh cell with tube \*2 Approximate values \*3 Please contact Maxell for conditions of use when using as assembled battery.

\*4 Measured under the following conditions: Charge CCCV: 1I/A/4.2V/50mA cut, Discharge CC: 0.2I/A/E.V. = 2.5V, Temperature: 25 deg. C

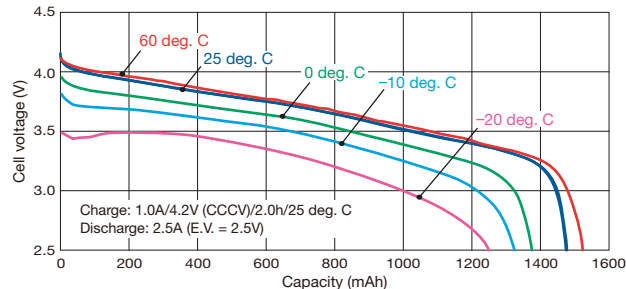
\*5 Measured under the following conditions: Charge CCCV: 1I/A/4.2V/50mA cut, Discharge CC: 0.2I/A/E.V. = 2.75V, Temperature: 25 deg. C

### Characteristics (INR18650PB1)

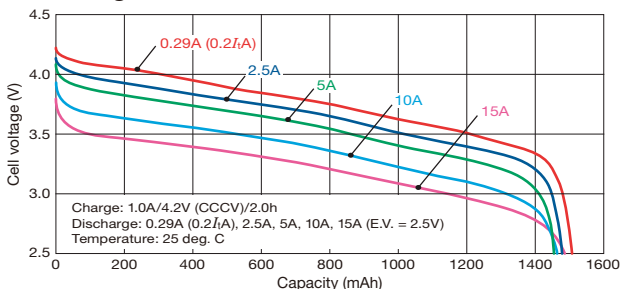
#### Charge characteristics



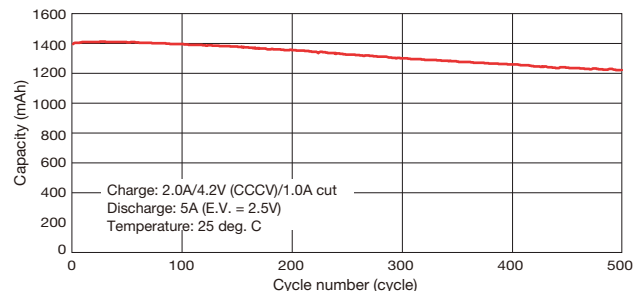
#### Discharge temperature characteristics



#### Discharge load characteristics



#### Cycle life characteristics



• Characteristics listed in this catalog are standard measured examples. Maxell does not guarantee these data. • Specifications are subject to change without notice. • This data is for lithium-ion cells only. Maxell offers these cells in battery pack format only. These include electronic circuits to prevent overcharge, over discharge and so on. These battery packs are custom-developed and produced according to special requirements regarding operating conditions and specifications. As a result, a minimum number of units may apply to such customized orders from customers purchasing battery packs.