

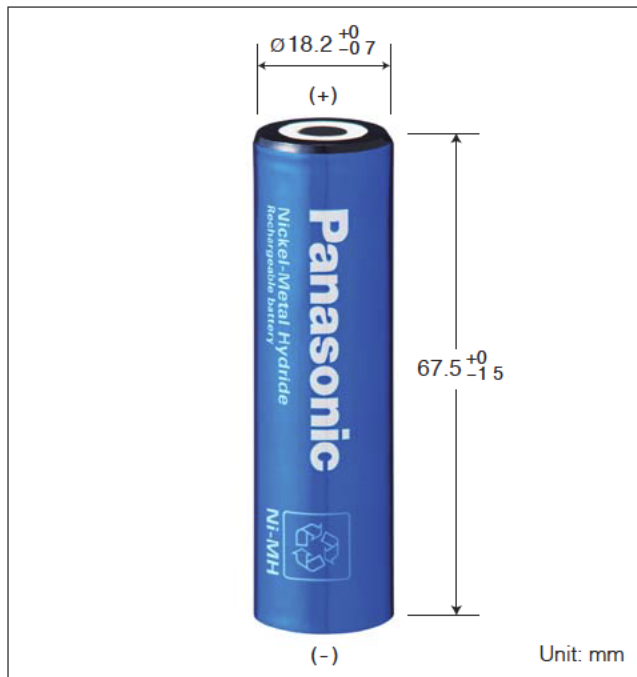
New  
**BK450A**  
LFat/A size

Old  
(HHR450A)

Standard type

N type

**Dimensions (with tube)**

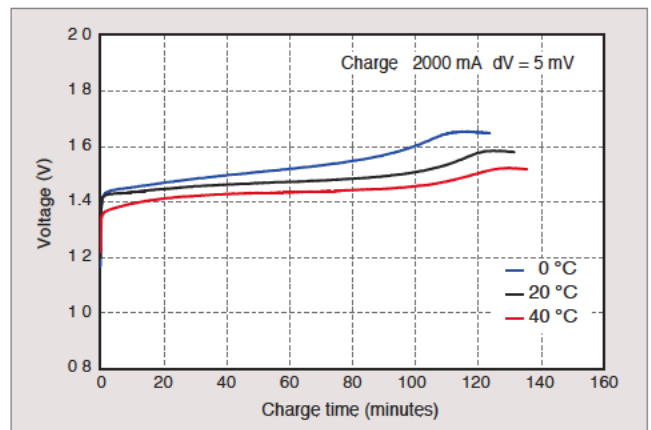


**Specifications**

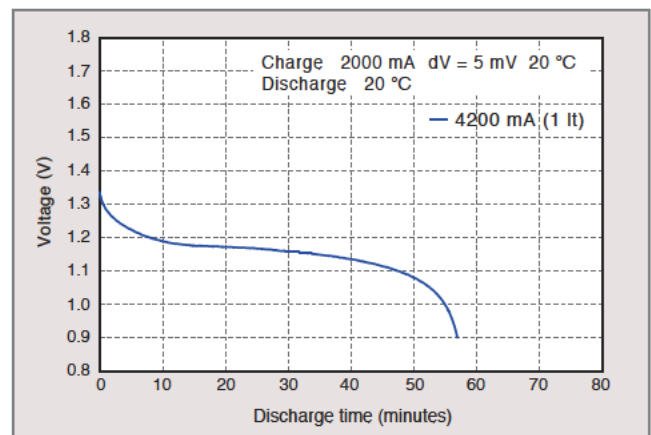
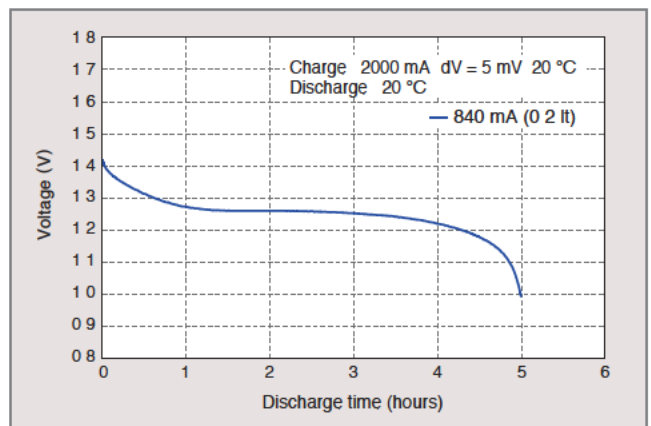
Diameter		18.2 +0 / -0.7 mm	
Height		67.5 +0 / -1.5 mm	
Approximate Weight		61 g	
Nominal Voltage		1.2 V	
Discharge Capacity	Average <sup>*1</sup>	4500 mAh	
	Rated (min.) <sup>*2</sup>	4200 mAh	
Approx. Internal impedance at 1000Hz at charged state.		25 mΩ	
Charge	Standard	420 mA X 16 hrs.	
	Rapid <sup>*3</sup>	2000 mA	
Ambient Temperature	Charge	Standard	0 °C to 45 °C
		Rapid	0 °C to 40 °C
	Discharge		-10 °C to 65 °C
	Storage	<1 year	-20 °C to 35 °C
<6 months		-20 °C to 45 °C	
<1 month		-20 °C to 55 °C	
<1 week		-20 °C to 65 °C	

\*1 After charging at 0.1 C for 16 hours discharging at 0.2 C  
 \*2 For reference only  
 \*3 Need specially designed control system Please contact Panasonic for details

**Typical charge characteristics**



**Typical discharge characteristics**



Battery performance and cycle life are strongly affected by how they are used. In order to maximize battery safety, please consult Panasonic when determining charge/discharge specs, warning label contents and unit design.

\* The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.