

# UE-PH120H-150



## 1. Preface

This specification is suitable for the performance of the **UE-PH120H-150** Ni-MH button rechargeable battery.

## 2. Model

UE-PH120H-150

## 3. Appearance

There shall be no such defects as discoloration, electrolyte leakage or no voltage.

## 4. Nominal specification

Description		Specification	
Model		UE-PH120H-150	
Size		PH120H	
Dimensions	Length (mm)	23.3±0.4	
	Width (mm)	15±0.4	
	Height (mm)	5.7±0.2	
	Weight (g)	Approx 5.2g	
Nominal Voltage(V)		1.2 V	
Nominal capacity (mAh)		150	
Internal Impedance(mΩ)		≤ 500	
Discharge Cut-off Voltage		1.0V	
Ambient temperature	Charge	standard	0°C to 40°C
		quick	10°C to 40°C
	Discharge		-10°C to 50°C
	Storage	<1 year	-10°C to 30°C
<3 months		-10°C to 40°C	

## 5. Characteristics

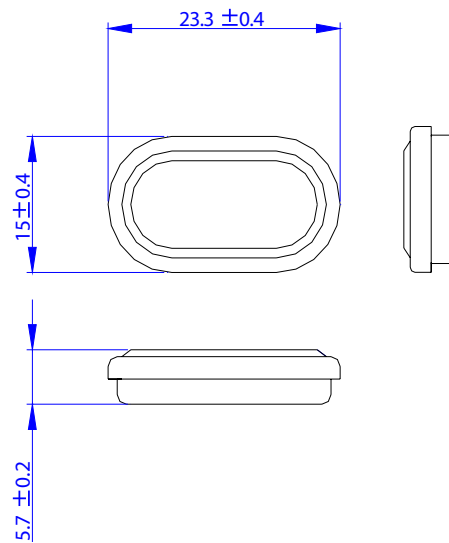
Unless otherwise specified, the standard range of atmospheric conditions as follows:

- Ambient Temperature  $20 \pm 5^{\circ}\text{C}$
- Relative Humidity  $65 \pm 20\%$
- Atmospheric Pressure  $960 \pm 100\text{mbar}$

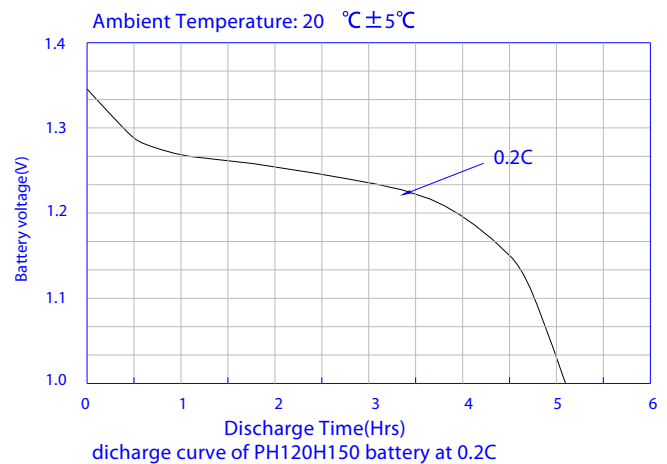
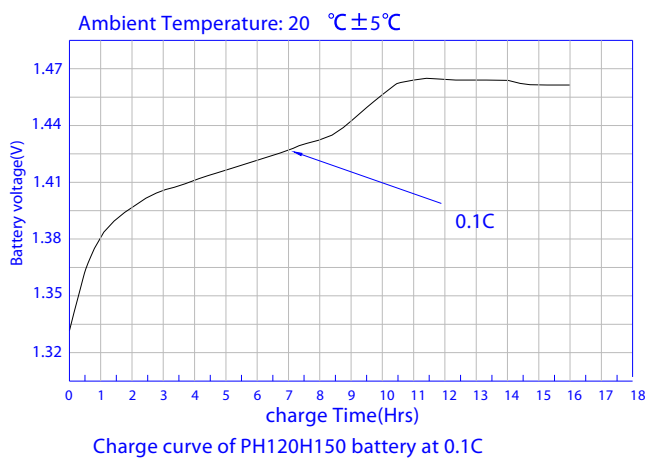
· Voltmeters and ammeters to be used in test shall be of grade 0.5 over

Test Item		Condition	Specification
1. Charge	standard	Charge at $0.1C_5$ for 16 hours	
	quick	Charge at $0.2C_5$ for 7 hours	
2. Standard Discharge		Discharge At $0.2C_5$ to 1.0V/cell	
3. Discharge Cut-off Voltage			1.0V
4. Capacity	Nominal	Standard Charge/Discharge	150mAh
	Typical	Standard Charge/Discharge	155mAh
5. Internal resistance		After charge at $0.2C_5$ to for 2.5 hours, rest 5 hours, measured at 1000Hz	$\leq 500\text{m}\Omega$
6. Cycle life		Standard by IEC	Capacity Retention $\geq 65\%$ After 500 cycles
7. Self-Discharge		The charged battery is stored for 28 days at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ . And the discharge time is measured at standard discharge	$\geq 180$ minutes
8. High Temperature Test		Store at $50^{\circ}\text{C}$ for 2 hours then at $0.2C$ Discharge, first, charge at $0.1C$ for 16h at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ .	$\geq 270$ minutes
9. Low Temperature Test		Store at $0^{\circ}\text{C}$ for 2 hours then at $0.2C$ Discharge, charge at $0.1C$ 16h at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ first.	No leakage
10. Short Circuit Test		Short circuit after fully charge	No explode
11. Drop Test		Free fall on the concrete from 1 meter using to 3 axis after fully charged	No leakage No short-circuit No crack of sleeve

## 6. Physical



## 7. Charge / discharge curve (charge at 0.1C, discharge at 0.2C)



## 8. Caution

8.1 Please charge battery follow the instruction of item 5.1, charge current cannot be more than the limit of item 5.1 and overcharge with high current is harmful. It may cause battery deformation, leak or even explosion.

8.2 Do not discharge battery to the condition of lower voltage than 1.0V. Overdischarge may decrease the cycle life and may cause battery deformation, leak or explosion.