UE-PH170H-210

1. Preface

This specification is suitable for the performance of the **UE-PH170H-210** Ni-MH button rechargeable battery.

2. Model

UE-PH170H-210

3. Appearance

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

4. Nominal specification

Description			Specification
Model			UE-PH170H-210
Size			PH170H
Dimensions	Diameter (mm)		25.2±0.2
	Height (mm)		MAX6.4
	Weight(g)		Approx 10g
Nominal Voltage(V)			1.2 V
Nominal capacity (mAh)			210
Internal Impedance(mΩ)			≤200
Discharge Cut-off Voltage			1.0V
Ambient temperature	Charge	standard	0℃ to 40℃
		quick	10℃ to 40℃
	Discharge		-10℃ to 50℃
	Storage	＜1 year	-10℃ to 30℃
		＜3 months	-10℃ to 40℃

5. Characteristics

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

· Ambient Temperature 20±5℃

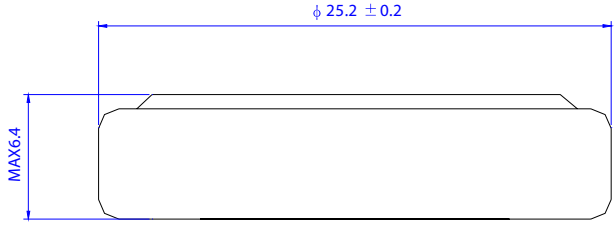
· Relative Humidity 65±20%

· Atmospheric Pressure 960±100mbar

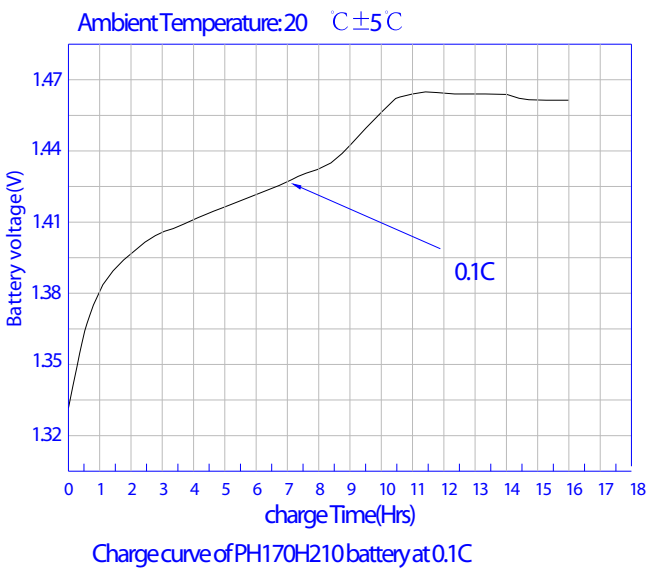
· Voltmeters and ammeters to be used in test shall be of grade 0.5 over

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	210mAh
	Typical	Standard Charge/Discharge	230mAh
5. Internal resistance		After charge at 0.2C_5 to for 2.5 hours, rest 5 hours, measured at 1000Hz	≤200mΩ
6. Cycle life		Standard by IEC	Capacity Retention≥ 65% After 500 cycles
7. Self-Discharge		The charged battery is stored for 28 days at 20℃ ± 5℃. And the discharge time is measured at standard discharge	≥180minutes
8. High Temperature Test		Store at 50℃for 2 hours then at 0.2C Discharge, Charge at 0.1C for 16h at 20℃±5℃ first.	≥270minutes
9. Low Temperature Test		Store at 0℃ for 2 hours then at 0.2C Discharge, charge at 0.1C 16h at 20℃±5℃ 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 for 3 axis after fully charged	No leakage No short-circuit

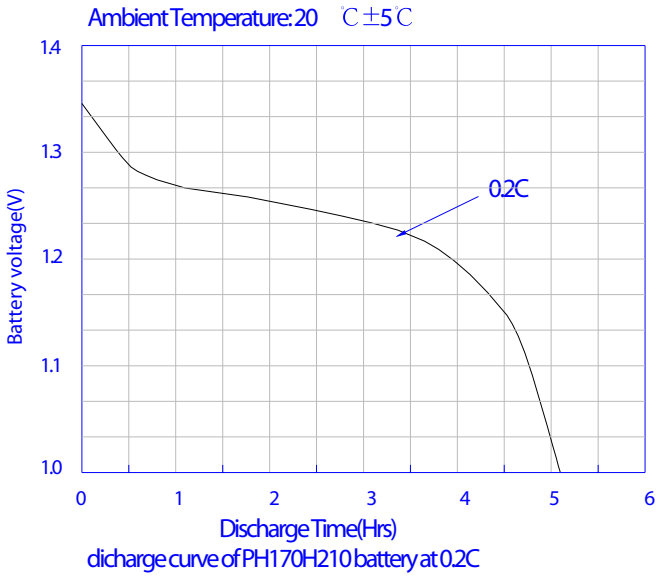
6. Physical



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



Charge curve of PH170H210 battery at 0.1C



dicharge curve of PH170H210 battery 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. Overcharge with high current is harmful, it may cause battery deformation, leakage 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.