APPROVAL SHEET

To:

Model: <u>NI-MH 9V 250mAh (250024)</u> Prepared by: Checked by:

Approved by:

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GREAT POWER BATTERY CO., LTD.

1. Preface

This specification is suitable for the performance of the **GREAT POWER** Ni-MH button rechargeable battery pack.

2. Model

NI-MH9V250

3. Appearance

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

4. Nominal specification

Description			n	Specification	
Model				NI/MH9V250	
Size				PH120H	
Dimensions	Length (mn	1)		26.5max	
	Width (m	ım)	With sleeve	17.5max	
	Height (mm	ו)		48.5max	
	Weight(g)			Approx 48g	
Nominal Voltage(V)			e(V)	8.4 V	
Internal Impedance(mΩ)			ce(mΩ)	≤1500	
Discharge Cut-off Voltage			Voltage	7.0V	
Ambient temperature		standard		0 to 40	
	Charge	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
	Standard	Charge at $0.1C_5$ for 16 hours	
1. Charge	quick	Charge at $0.2C_5$ for 6-7 hours	
2. Standard Discharge		At 0.2C ₅ to 7.0V/cell	≥5h
3. Discharge Cut-off Voltage			7.0V
4. Capacity	Nominal	Standard Charge/Discharge	250mAh

5. Internal resistance	After charge at $0.2C_5$ to for 2.5 hours, rest 5 hours, measured at 1000Hz	≤1500mΩ
6. Cycle life	By IEC standard: Charge ($0.25C_5$) for 3h 15min, discharge ($0.25C_5$) for 2h 30 min	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 Nominal discharge	≥180minutes
8. High Temperature Test	Store at 40 50 60 for 2 hours then Charge/Discharge	No leakage
9. Low Temperature Test	Store at 0 for 2 hours then charge/discharge	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 Break No short-circuit

6 mechanics



with sleeve

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 open the cover.
- 8.2 Do not discharge battery to the condition of lower voltage than 7.0V. Overdischarge may decrease the cycle life and may cause battery deformation, leak or open the cover.