Great Power Battery Co. Ltd.

Excellent Quality, Prompt Delivery and Competitive Price

APPROVAL SHEET

To: _____

Model: 3PH-60H80-L-3T

Prepared by: _____

Checked by: _____

Approved by: _____

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1. Preface

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

2. Model

3PH60H80-L-3T

3. Appearance

There shall be no such defects as deformation,flaw,stain,discoloration or electrolyte leakage.

4. Nominal specification

Desription			**Specification**
Pack model			3PH60H80-L-3T
Cell size			80H
Dimensions	Length(mm)		19.2±0.5
	Width(mm)		15.4±0.3
	Total Height(mm)		20.4±0.3
	Weight(g)		Approx.11.2g
Nominal Voltage(V)			3.6
Nominal capacity(mAh)			80
Internal Impedance(mΩ)			≤900
Discharge Cut-off Voltage			2.0V
Ambient temperature	Charge	standard	0℃ to 40℃
		fast	10℃ to 40℃
	Discharge		-10℃ to 50℃
	Storage	＜1 year	-10℃ to 30℃
		＜3 months	-10℃ to 40℃
		The relative humidity should keep with in 65±20%	

5.Characteristics

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

Ambient temperature 20±5℃

Relative humidity 65±20%

Atmospheric pressure 960±100mbar

Accuracy of voltmeters and amperometers to be used in testing shall be equal to or better than the grade 0.5.

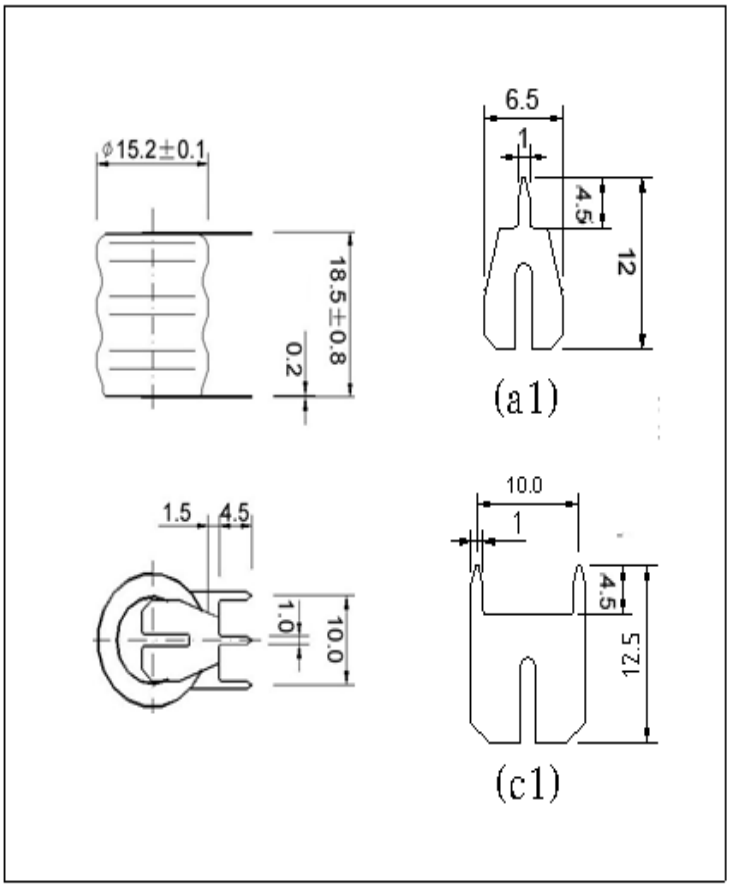
Test item		Condition	Specification
1. Charge	Standard	Charge at 0.1C for 16 hours	
	Fast	Charge at 1C to -△V=20mV	
2. Discharge		At 0.2C to 2.0V	
3. Discharge cut-off voltage			2.0V
4.Capacity (mAh)	Minimun	Standard charge/discharge	80mAh
	Typical	Standard charge/discharge	85mAh
5. Internal resistance		After fully charge,rest 1 hour, measured at 1000Hz	≤900mΩ
6. Self-Discharge		The charged battery is stored for 28 days at 20℃±5℃. And the discharge time is measured at standard discharge	≥180minutes
7. High temperature test		Store at 40℃、50℃、60℃ for 2 hours then charge/discharge	No leakage
8. Low temperature test		Store at 0℃ for 2 hours then charge/discharge	No leakage
9. Short circuit test		Short circuit after fully charge	No explode
10. Drop test		Free fall on the concrete floor from 1 meter after fully charged	No leakage No short-circuit

11.Cycle life	Charge	Rest	Discharge	Capacity retention ≥60% after 500cycles
1	0.1C for 16h	0	0.25C for 2h20min	
2~48	0.25C for 3h10min	0	0.25C for 2h20min	
49	0.25C for 3h10min	0	0.2C to 2.0V	
50	0.1C for 16h	1~4h	0.2C to 2.0V	

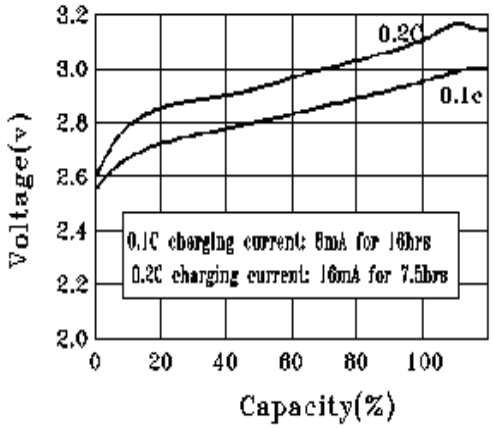
Ni-MH rechargeable cylindrical battery pack (Data Sheet)

Specification

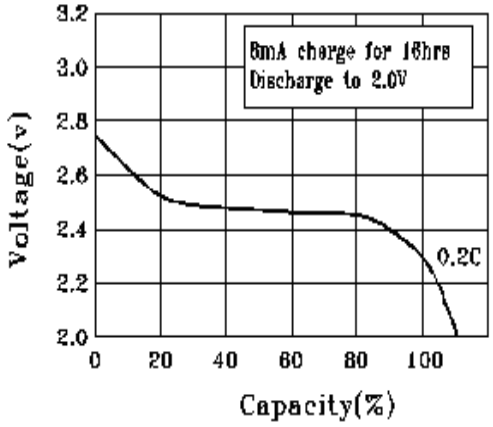
Nominal Voltage			3.6V
Dimensions	Length		19.2 ±0.5mm
	Width		15.4±0.2mm
	Height		20.4 ±0.4mm
	Apx. Weight		11.2 g
0.2C Discharge Capacity		Typical	85mAh
		Minimum	80mAh
Typical Internal Impedance			Less than 9.00mΩ
Charge	Standard		8mA for 16hrs
	Fast		16mA for about 7.5hrs
Life expectancy			500 cycles
Operating Temperature	Charge	Standard	0°c to 40°c
		Fast	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



CHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS



DISCHARGE CHARACTERISTICS
AT DIFFERENT TEMPERATURE