# NICKEL METAL HYDRIDE BATTERY

## NH-AA2200-T

**BRIEF SPECIFICATION**

Model:NH-AA2200-T
Nominal Voltage: 1.2V
Nominal Capacity: 2200mAh
Weight: Approx. 31g
Manufacturer: EEMB Co., Ltd.
Website: http://eemb.com

1, Preface

This specification is suitable for the performance of the Ni-MH rechargeable battery produced by EEMB CO.,LTD

2, Model

NH-AA2200-T

3, Appearance

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

4, Nominal Specification

| Description | | | Specification |
|---|---|---|---|
| Model | | | NH-AA2200-T |
| Size | | | AA |
| Dimensions | Diameter (mm) | | 14.2±0.3 |
| | Height (mm) | | 50.0±0.5 |
| | Weight (g) | | Approx.31g |
| Nominal Voltage (V) | | | 1.2 |
| Nominal Capacity (mAh) | | | 2100 |
| Internal Impedance (mΩ) | | | ≤30 |
| Discharge Cut-off Voltage | | | 1.0V |
| Ambient 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 |
| | | The relative humidity should keep with in 65±20%. | |

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## 5, Characteristics

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

Ambient temperature: 20±5°C
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 grade 0.5.

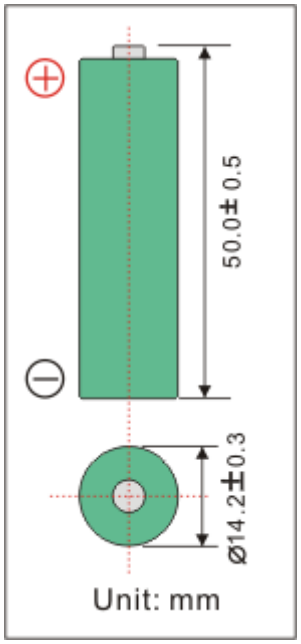
| Test item | | Condition | Specification |
|---|---|---|---|
| 1, Charge | Standard | Charge at 0.1C for 16 hours | |
| | Fast | Charge at 0.5C to –ΔV = 5～10mV | |
| 2, Standard Discharge | | At 0.2C to 1.0V | |
| 3, Discharge Cut-off voltage | | | 1.0V |
| 4, Capacity (mAh) | Minimum | Standard charge / discharge | 2200mAh |
| | Typical | Standard charge / discharge | 2250mAh |
| 5, Internal resistance | | After fully charge, rest 1 hour, measured at 1000HZ | ≤30mΩ |
| 6, Self discharge | | The charged battery is stored for 28 days at 20±5°C. And the discharge time is measured at 0.2C discharge | 0.2Cdischarge≥ 180minutes |
| 7, High temperature test | | Store at 40°C, 50°C, 60°C for 2 hours then charge/discharge | No leakage |
| 8, Low temperature test | | Store at 0°C 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 from 1 meters after fully charged | No leakage<br>No short-circuit |
| 11, IEC61951-2 (2003) 7.4.1.1 Cycle Life Test | | | Capacity retention ≥60% after 500 cycles |
| Cycle life | Charge | Rest | Discharge |
| 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 1.0V |
| 50 | 0.1C for 16h | 1-4h | 0.2C to 1.0V |

**Note: Typical values relative to cells stored for one year or less at + 30℃ max.**

## 6, Specification

| | | | |
|---|---|---|---|
| Nominal Voltage | | | 1.2V |
| Dimensions | Diameter | | 14.2±0.3mm |
| | Height | | 50.0±0.5mm |
| | Approx. Weight | | 30g |
| Nominal Capacity (0.2C discharge) | Typical | | 2250mAh |
| | Minimum | | 2200mAh |
| Typical Internal Impedance | | | Less than 30mΩ upon fully charged |
| Charge | Standard | | 220mA for 16hrs |
| | Fast | | 1100mA for about 150mins |
| Life expectancy according to IEC61951-2 (2003) 7.4.1.1 | | | 500 cycles |
| Operational 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 |

## 7, Dimensions

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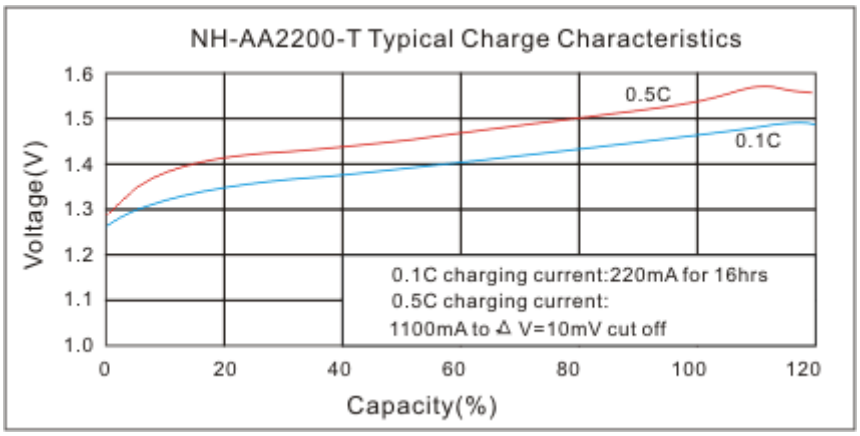
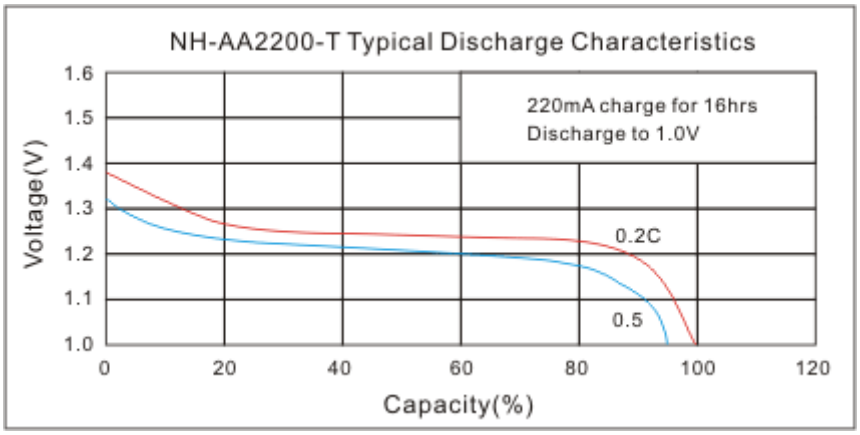
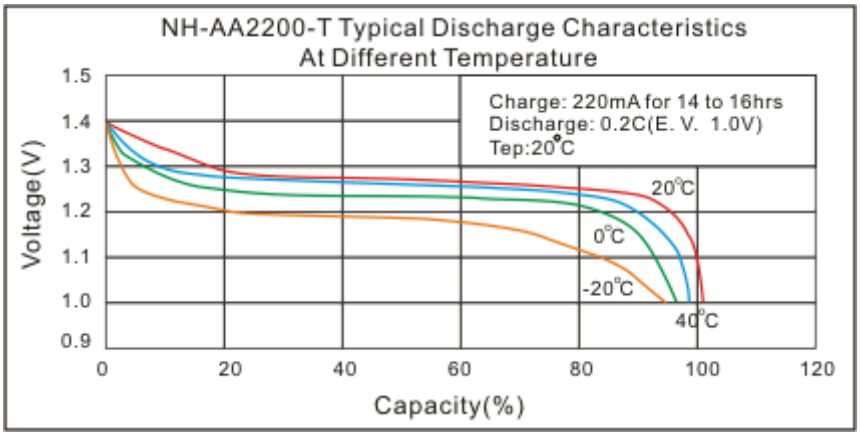
## 8, Performance

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