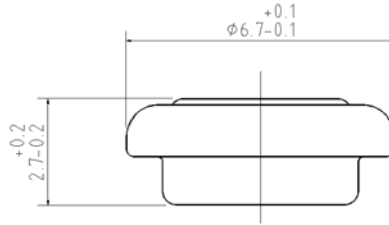


HUALI BATTERY CO., LTD.

8H Ni-MH BUTTON CELL

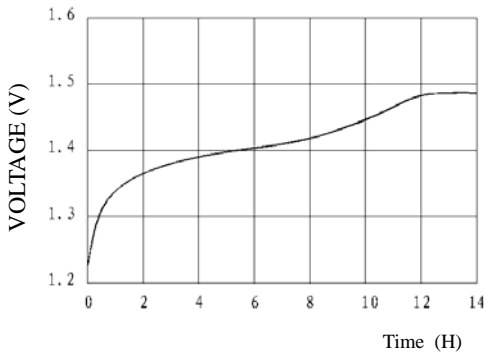
TECHNICAL DATA



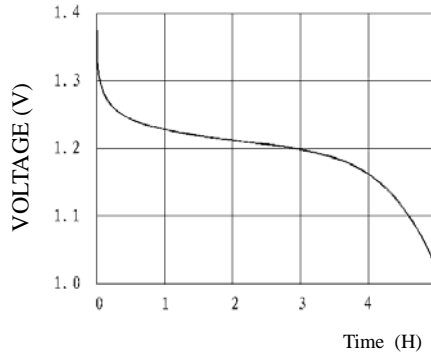
Model	Voltage	Capacity	Recommended Trickle Charge Current	Nominal Charge Current	Normal Charging Time	Nominal Discharge Current	Weight
8H	1.2V	8mAh	0.2~0.4mA	0.8mA	14~16h	1.6mA	0.36g

TECHNICAL CHARACTERISTICS

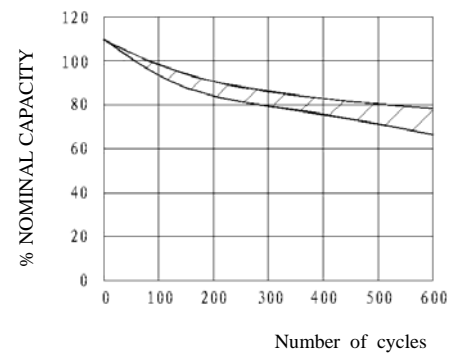
TYPICAL CHARGE CURVE (0.8mA)



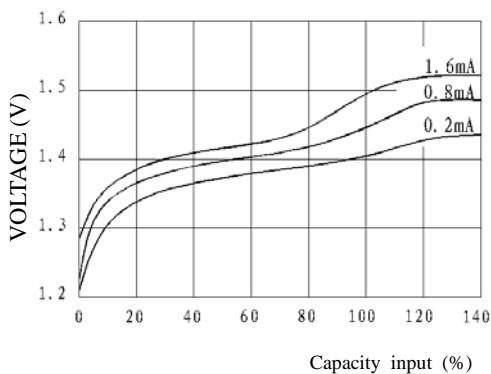
TYPICAL DISCHARGE CURVE (1.6mA)



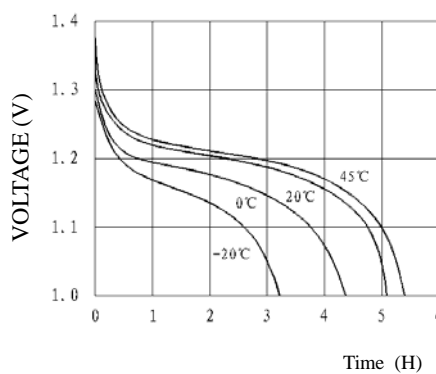
CYCLE LIFE CURVE



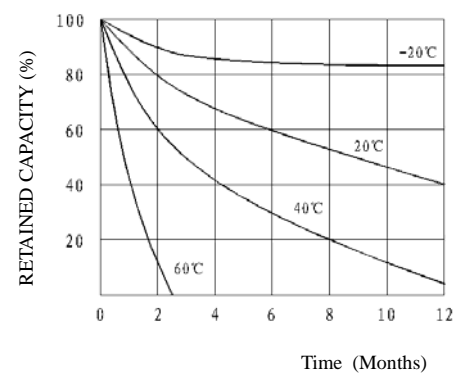
TYPICAL CHARGE CURVE AT VARIOUS CURRENTS



DISCHARGE CURVE AT VARIOUS TEMPERATURES (1.6mA)



SELF DISCHARGE RATE AT VARIOUS TEMPERATURES



TECHNICAL DATA

1、 APPLICATION

This specification applies to the Ni-MH batteries.

Model: 8H

2、 CELL AND TYPE

2.1 Series: Ni-MH batteries

2.2 Type: Button type

3、 RATINGS

3.1 Nominal voltage: 1.2V

3.2 Nominal capacity: 8mAh

3.3 Typical weight: 0.36g

3.4 Charging Parameters

Standard charge: $1.8\text{mA} \times 16\text{h}$

Charge at constant voltage and limited current: charge voltage is 1.43V Max.
current $< 4\text{mA}$

Trickle current: 0.24mA

3.5 Discharge cut-off voltage: 1.0V

3.6 Temperature range for operation (Humidity: Max. 85%)

Standard charge 0~+45°C

Trickle charge 0~+45°C

Discharge -10~+45°C

3.7 Temperature range for storage (Humidity: Max. 85%)

Within 2 years -20~+35°C

Within 6 months -20~+45°C

Within a month -20~+45°C

3.8 Life Expectancy (typical)

Cycle Life ≥ 500 Cycles (IEC)

Trickle Charge \geq up to 5 years (20°C)

4、 ASSEMBLY & DIMENSIONS

Per attached drawing

5、 PERFORMANCE

5.1 TEST CONDITIONS

The test is carried out with new batteries (within a month after delivery)

Ambient conditions

Temperature: $+25 \pm 5^\circ\text{C}$

Humidity: $60 \pm 20\%$

Standard discharge before test:

Standard discharge: 1.6mA to 1.0V

5.2 TEST METHOD & PERFORMANCE

Test Item	Unit	Specification	Conditions
Capacity	mAh	$\geq 8 *$	Charge at 0.8mA for 16h Then discharge at 1.6mA to 1.0V
Open Circuit Voltage(OCV)	(V)	≥ 1.3	After 1 hour standard Charge at 0.8mA
Internal Impedance	m Ω /cell	≤ 1200	Upon fully charge
Max. Discharge Current	mA	4	
High rate Discharge (4mA)	Minute	≥ 60	Standard charge Before discharge
Over charge		No leakage No explosion	Continuous charge at 0.24mA for 1 year
Charge Retention	mAh	≥ 6.4	Standard charge; Storage: 28days; Standard discharge at 1.6mA
Cycle Life	Cycle	≥ 400	IEC 61951-2 (2003) 7.4.11
Leakage		No leakage No explosion	Continuous charge at 0.8mA for 14 days

* The above tests can be allowed to repeat 3 times. But the test should be terminated once it meets the requirement.

5.3 Humidity

The battery shall not leak during the 14 days which it is submitted to the condition of a temperature of $33 \pm 3^\circ\text{C}$ and a relative humidity of $80 \pm 5\%$.

6、 PRECAUTION

6.1 If you have long time to no use it (such as for one year), you'd better recharge again the battery although our product is full charge on delivery.

6.2 We recommend you to set the ending voltage at 1.0V/cell. If it is below 1.0V/cell, the battery would be destroyed.

6.3 Avoid short-circuit and reverse polarity when connecting. Do not fire and disassemble. Because its content is corrosive, it can hurt your skin and eyes.

6.4 Use and store cells only within the specified working temperature and humidity range.