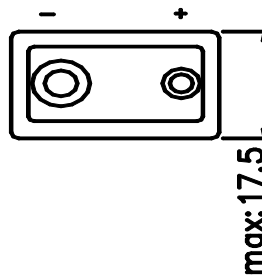
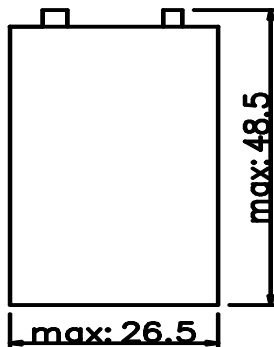




ARH956066

1.SPECIFICATIONS:

Type	Sealed Ni-MH Prismatic Battery pack
Size	Ni-MH 9V
Mode	6F22
Nominal Voltage	8.4V
Nominal Capacity	300mAh
Average Weight	53.0g
Dimensions(including PVC tube)	
Height(h)	Max: 48.5mm
Width(W):	Max: 26.5mm
Thickness(t):	Max: 17.5mm
Capacity (20°C , 0.2CA discharge to 7.0V) (Reference only)	300mAh
Typical Capacity:	310mAh
Minimum Capacity	300mAh
Charging Method: ( 20°C )	
Standard Charge:	Charge with 30mA for 16 h
Quick Charge	Charge with 84 mA for 4.5 h
Fast Charge:	Charge with 150mA for 144 min ( Under - $\Delta V$ controlled 70mV )
Max Overcharge Current	30 mA(No longer than 100 h)
Trickle Current	9~15mA
Operating Temperature(reference only):	
Storage	-20°C ~ +35°C
Discharge:	-20°C ~ +60°C
Standard Charge	0°C ~ +45°C
Fast Charge	+10°C ~ +45°C



## 2,Performance

Testing Item	Testing Conditions	Standard
Standard Testing Condition	If not specially described, Temperature 20+/-5℃ Relative Humidity: 65±20%。	
(1)Standard Charge	0.2CA discharge to 7.0V,then 0.1CA charge for 16 h (Constant Current)	
(2)Fast Charge	0.2CA discharge to 7.0V,then 0.5CA charge for 144min ( Under -ΔV controlled 70mV )	
(3)Open Circuit Voltage	Test within 14 days after standard charge	≥8.75V
(4)Nominal Capacity	Have 1-4 h of rest after standard charge,then 0.2CA discharge to 7.0V, 3 cycles permitted	≥280 min
(5)High Rate Discharging Capacity	Have 1-4 h of rest after fast charge, Then 0.5CA discharge to 7.0V,3 cycles permitted	≥108 min
(6)Cycle Life	for GB/T 15100.2-2003/IEC61951-2: 2003(7.4.1.1)	≥500 th cycle
(7)Over-charge	After(4) testing, 0.1CA charge for 48 h, check cell surface,0.2CA discharge to 7.0V.	No deformation or leakage can be found,and ≥270 min
(8)Over-Discharge	After(4) testing, 0.2CA discharge for 24 h,under constant impedance, then standard charge,rest for 30 min,0.2CA discharge to 7.0V.	≥240 min
(9)Temperature	Fast charged as (2) under 20+/-5℃ ,stored 3 h,under following temperatures,then 0.5CA discharge to 7.0V: a)Discharging Temperature: 0℃ b)Discharging Temperature: 20℃ c)Discharging Temperature: 40℃	Discharging Time 90 min 100 min 90 min
	Fast charged as (2) under following temperature,stored 3 h under 20+/-5℃ , then 0.5CA discharged to 7.0V: a) Charging Temperature: 0℃ b)Charging Temperature: 20℃ c) Charging Temperature: 40℃	Discharging Time 100 min 100 min 90 min
(10)Self-discharge	After standard charge, stored for 30 days under 20+/-5℃ ,then 0.2C discharged to 7.0V	Discharging Time ≥225 min
(11)Storage	Charged or discharged as (1) condition and stored for 180 days under 20+/-5℃ ,then tested as(4) condition	Discharging Time ≥ 240 min
(12)Vibration	Vibration in any direction at amplitude of 4 mm and A frequency of 1000 cycles per minute and continue for 60 min.	The battery shall conform electrical spec, mechanical

(13)Drop	The battery shall be subjected to drop from the height of 100cm to an oak board more than 10mm thick,the test should be carried for 3 times at each direction of the battery axis.	deformation or damage is acceptable
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2. Note:

- 1).Do not dispose of cell into fire or be dismantled under any condition.
- 2).Do not mix different cell types and capacities in the same battery assembly.
- 3).Charge and discharge under specified ambient temperature recommended to BFN specification.
- 4).Short circuit leading to cell venting must be avoided .
- 5).Never solder onto cell directly.
- 6).Cell reversal should be avoided.
- 7).Use batteries in extreme condition may affect the service life, such as:extreme temperature, deep cycle,extreme overhcharge and over discharge.
- 8).Batteries should be stored in a cool dry place.
- 9).Once problems be found,stop using,send batteries to local dealer.

3,Storage

- 1).It is strongly recommended to store Ni-Cd batteries and cells in the temperature range from -20 to 25°C ,and in low humidity and no corrosive gas environment,to maintain a reasonably high capacity recovery level.
- 2). Avoid storage higher (e.g.35°C),lower temperature than -20°C ,or higher humidity which would result in deterioration or damage to the cells and batteries such as follows:

4, Permanent capacity loss

Electrolyte leakage resulted from the expansion or shrinkage of organic material inside the cells

5, Rust of metal parts.

- 6, Up to three full cycles of charge /discharge after long-termed storage may need to obtain highest capacity.

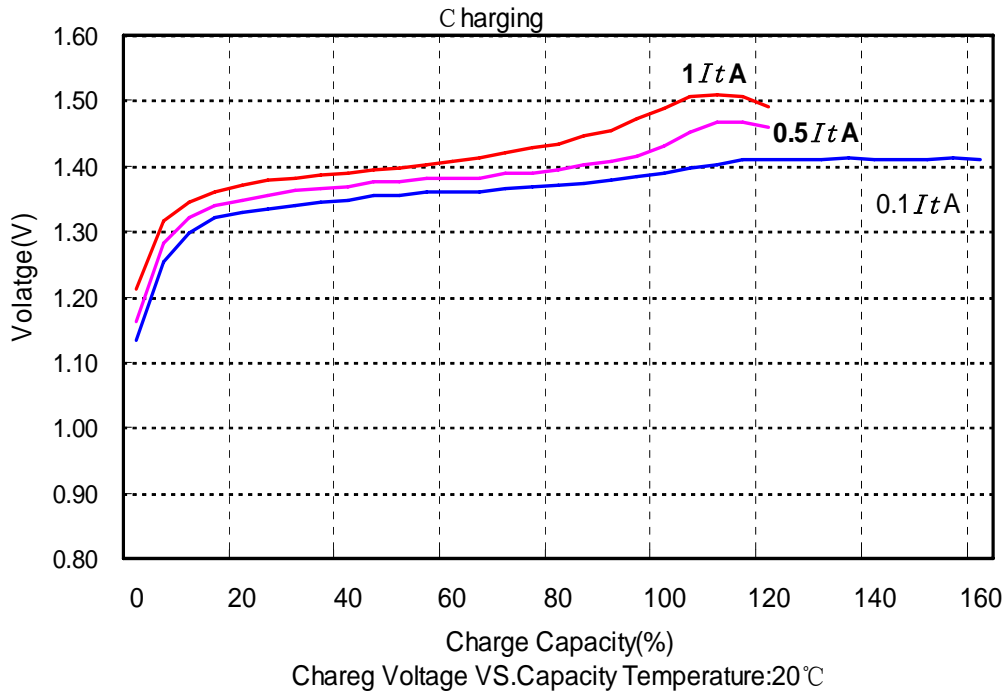
GB/T 15100.2-2003/IEC61951-2: 2003(7.4.1.1) Endurance in cycles

Cycle number	Charge	Stand in charged condition	Discharge
1	0.1CA (28mA) for 16 h	none	0.25CA (70mA) for 2 h 20 min
2-48	0.25CA (70mA) for 3 h 10 min	none	0.25CA (70mA) for 2 h 20 min
49	0.25CA (70mA) for 3 h 10 min	none	0.25CA (70mA) to 7.0 V
50	0.1CA (28mA) for 16 h	1 h to 4 h	0.2CA (56mA) to 7.0 V

Cycle 1 to 50 shall be repeated until the discharge duration on any 50th cycle becomes less than 3 h. At this stage, a repeat capacity measurement as specified for cycle 50 shall be carried out.

The endurance test is considered complete when two successive capacity measurement cycles give a discharge duration of less than 3 h. The number of cycles obtained when the test is completed shall be not less than 500.

Effect Different Current On Ni-MH Prismatic battery Cell Charge Curve



Effect Different Current On Ni-MH Prismatic battery Cell Discharge Curve

