

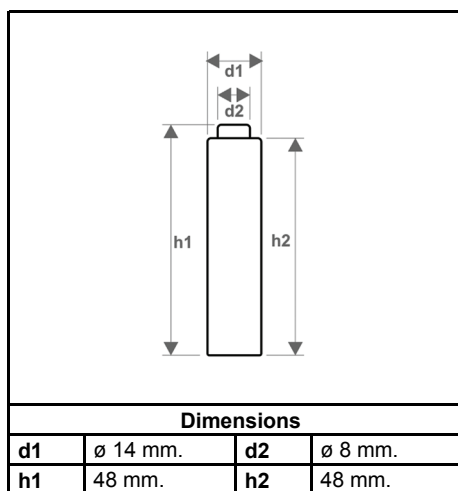
1.- Introduction

This specification governs the performance of the following FULLWAT High Temperature Nickel-Cadmium Cylindrical cell (N800AAJFH) and its stack-up batteries.

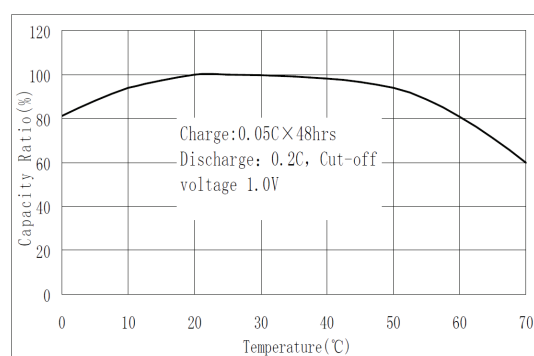
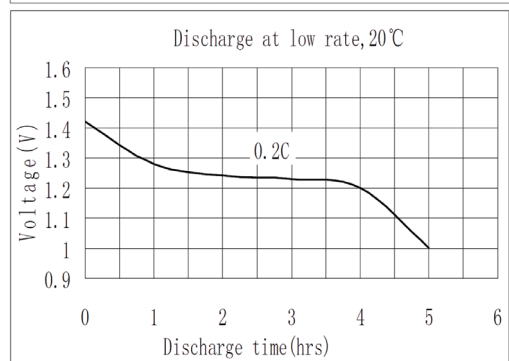
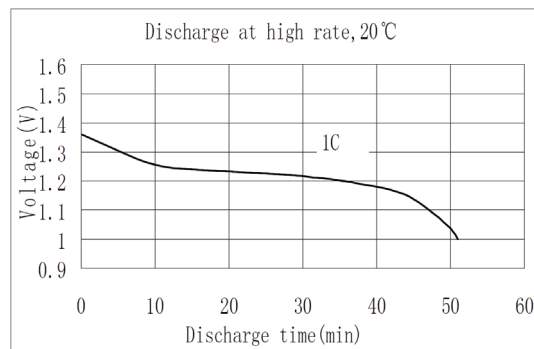
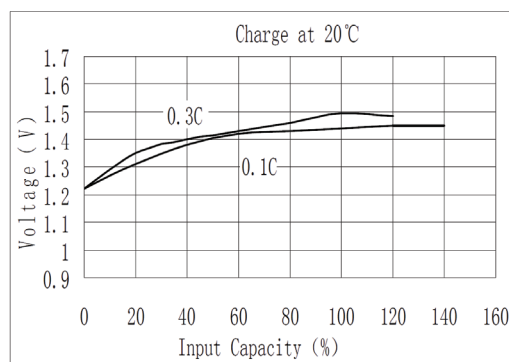
2.- Data of stack up batteries

All data involves and weight to stack-up battery are equal to the value of unit cell time the number of unit cell which consisted in the stack batteries.

3.- Ratings, configuration and dimensions



Nominal capacity			800 mAh
Nominal voltage			1,2 V
Charge current		Standard	80 mAh
		Fast	240 mAh
		Trickle	24-40 mAh
Charge time		Standard	16 hrs
		Fast	4 hrs
Temperature	Charge	Standard	0 ~ 45 °C
		Fast	10 ~ 45 °C
		Trickle	0 ~ 60 °C
	Discharge		-30 ~ 60 °C
	Storage		-20 ~ 60 °C
Impedance (mohms) (After charge)			26
Weight			20 grs.



4.- Performance

Unless otherwise stated, tests should be done within one month of delivery under the following conditions:

Ambient temperature (T1):	20 ± 5 °C
Relative humidity	65 ± 20 %
Charge conditions	80 mA (C/10) x 16 hours
Discharge conditions	160 mA (C/5) to 1,0 V/cell

Test	Unit	Value	Conditions	Remarks
Capacity	mAh	>= 800	Standard charge discharge	Up to 3 cycles are allowed
Open circuit voltage (VOC)	V/cell	>= 1,25	Within 1 hour after standard charge	
Internal impedance	mohms/célula	Maximum < 26	Upon fully charge (1KHz)	
High rate discharge (1C)	Minute	>= 51	Standard charge, 1 hour rest before discharge by 800 mA (1C) to 1,0 V/cell	Up to 3 cycles are allowed
Charge retention	mAh	>= 520 (65 %)	Standard charge. Storage: 28 days. Standard discharge.	T=20±5°C
Cycle life	Cycle	>= 500	IEC61951-1(2003) 7. 4.1.1	
Previsional operating life (Trickle charge)	Year	>= 4	IEC61951-1(2003) 7. 4.2.3	
Leakage		No leakage nor explosion	Fully charge at 400 mA (C/2).	
Vibration resistance		Change of voltage should be under 0,02V/cell, change of impedance should be under 5 mohms/cell.	Charge the battery at C/10 for 14 hours, Then leave for 24 hrs, check battery before/after vibration. Amplitude 1,5 mm.. Vibration 3000 CPM. Any direction for 60 min.	
Impact resistance		Change of voltage should be under 0,02V/cell, change of impedance should be under 5 mohms/cell.	Charge the battery at C/10 for 14 hours, Then leave for 24 hrs, check battery before/after dropped. Height = 50 cm. Wooden board (thickness 30mm) Direction not specified, 3 times.	

5.- External appearance

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation.

6.- Warranty

One year limited warranty against workmanship and material defects.

7.- Caution.

- Reverse charging is not acceptable.
- Charge before use. The cells/batteries are delivered in an uncharged state.
- Do not charge/discharge with more than our specified current.
- Do not short circuit the cell/battery. Permanent damage to the cell/battery may result.
- Do not incinerate or mutilate the cell/battery.
- Do not solder directly to the cell/battery.
- The life expectancy may be reduced if the cell/battery is subjected adverse conditions like: extreme temperature, deep cycling , excessive overcharge/ over-discharge.
- Store the cell/battery uncharged in a cool dry place. Always discharge batteries before bulk storage or shipment.