RMH0628

1. SCOPE

This technical specification is applied to a sealed Nickel Metal Hydride cylindrical rechargeable battery as a power supply for Radio Battery. The battery pack is bonded by 6 pieces of 1800mAh single cell in series(6S).
The battery converts chemical energy into electrical energy by chemical reaction.
The total voltage of battery pack is equal to six cells voltage.

2. CELL TYPE

Cell : Sealed Ni-MH Cylindrical Rechargeable Battery
Size : HHR200AB

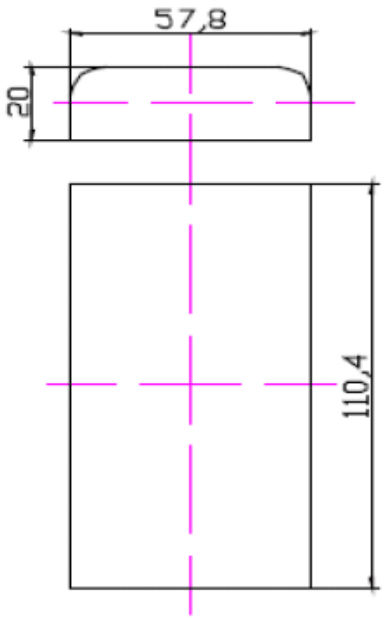
3. PACK RATING

Open Circuit Voltage within 1 hr fully charging	: 7.2 V or more per pack
Nominal Voltage	: 7.2 V per pack
Rated Capacity	1800mAh
Standard Charging (constant current, constant voltage)	: 180mA 15 hrs to 8.4V Max
Quick Charging (constant current, constant voltage)	: 900mA 3.5 hrs to 8.4V Max
Standard Discharging (constant current constant voltage)	360 mA
Internal Impedance (maximum)	: ≤0.3ohm
Standard Charging Temperature and humidity range	: 0°C to 45°C, (45~85%RH)
Discharging Temperature and humidity range	: -20°C to 60°C, (45~85%RH)
Storage Temperature and humidity range (3 month)	-20°C to 45°C, (45~85%RH)

4. PHYSICAL CHARACTERISTICS

Weight of battery : 232g±0.5g

Nominal size per pack (for reference only) : 20(H)×110.4(L) ×57.8(W)mm



5. ELECTRICAL TEST

Unless otherwise stated in this specification, all testing procedure should be carried out at 20±5°C temperature and a relative humidity of 65±20%.

5.1Charging Characteristics

Charging Voltage

The battery is charged under standard charging at a constant current of 180mA 15 hrs to 8.4V,

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Charging Temperature

The temperature while standard charging should not be higher than 60°C.

Saturated Charging

At standard charging, the battery will be saturated at the maximum voltage of 8.4V per pack.

5.2 Capacity Characteristics

Vary Discharge Rate Capability

The battery is charged under standard charging at a constant current of 180mA 15 hrs to 8.4V the battery shall deliver the following capacities.

Discharge Current	Minimum Capacity
360mA	1850
1800mA	1800

Discharge Capability at Vary Temperature

The battery is charged under standard charging at a constant current of 180mA 15 hrs to 8.4V.

The battery is discharged at 180mA to 6.0 V/ pack at the following temperatures; the battery shall deliver the following capacities.

Temperature (°C)	Minimum % Rating Capacity
60	97.6
20	102
0	99

6. RELIABILITY (CYCLE LIFE) TEST

The test is a series of charge and discharge cycles, the recommended procedures as follows. The battery is charged at constant current of 180mA to 8.4V / pack (1.4 V / cell), and then discharged at constant current of 180mA to 6.0 V / pack (1.0 V / cell) at 20°C. This charge and discharge cycle is repeated until the nominal capacity drops down to 65%. The total cycles shall not be less than 300 and the battery shall be free from leakage.

7. MECHNICAL TESTA

7.1 Vibration Test

The battery shall be mechanically and electrically normal after vibration which has an amplitude of 4mm a frequency of 1000 cycles per minutes and it should be continued in any directions during 60 minutes. The battery is observed to be normal.

7.2 Dropping Test

The battery was dropped from a vertical height of 1M onto a flat, firm, non-yielding surface. The same battery was dropped in the same manner three times. The battery was then observed and appears to be normal.

8. SAFETY DEVICE AND ABUSE REQUIREMENT

Circuitry protection as described below has been present inside the battery pack, to insure safety in case of misuse.

Over charge

The battery shall not explode after 5hrs of charging at 1.7A.

9. SUPPLY

The battery should be storage or transportation at open circuit and discharged state.

10. SAFETY PRECAUTIONS AND HANDLING

If inappropriate handling of the battery, it may cause the equipment malfunction from affecting the battery.

Be sure that the battery pack is handled properly.

The battery shall be charged before first time application by a specified charger.

Always keep the battery in a cool and dry place.

Be sure to use a charger specified by manufacturer.

The battery pack includes flammable organic solvents. If inappropriate handling occurs it is possible that the battery may rupture, leakage, ignite, or overheat, causing irreparable damage.

Do not disassemble or modify the battery pack. The battery pack is equipped with built in safety protection features.

Do not externally short circuit the battery packs.

Do not use or leave battery nearby fire, stove or heated place (more than 80°C). It could melt the resin separator causing it to overheat.

If submerged in water, the safety circuitry may be damage the point where the safety devices will not operate properly. Possible overheating, ignition and burst may occur.

Do not directly solder on the battery pack. Heat can melt down its insulation and damage safety circuitry.

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Do not use extreme pressure or another medium for potential deformation of the battery pack.