

Engineering Specification

Product : Battery Charger

Model No. : BC-0805B

Date : 2012-05-21

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0 Revision History and Deviation

0.1 Revision History

Revision	Date	By	Description of Change
1.0	2012-05-21		New release

0.2 Notice of Deviation

Customer Request	Deviation for samples	Mass production
Notice of items to be completed before mass production		
Description	L/T	Remarks

1 Product Features

1.1 Battery Type

Suitable for 2 pcs 1.2V NiMh/NiCd AA/AAA batteries

1.2 Reverse Polarity Protection

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Special structure of outer casing can prevent reverse connection of battery polarities, protects the charger and batteries from being damaged

1.3 Charging Indicators

Red LED on Charging

2 Electrical Performance and Tests

2.1 Charging Unit

2.1.1 Input

Input voltage DC 5V 500MA(mini usb input)

2.1.2 Charging current

Charging current: 150mA

3 Mechanical Tests and Requirements

3.1 Drop test

Drop from a height of 3 feet onto a concrete floor covered with 1/8 inch vinyl tile. Drop 3 times totally, each time on a different product surface. After that, test again the appearance, the insulation function, indicator function and electrical performance.

3.2 Surface

Smooth surface, no scratch, flashes, blot and crack. Hardwares get no rust, flashes and scratch

3.3 Vibration Test

The frequency sweep for each item on different surface is 10 times under the condition of the frequency 10~55HZ and the amplitude 0.35mm. After that, test again the appearance, the insulation function, indicator function and electrical performance.

3.4 High Temperature Test

Put the unit, which is without package under the temperature of $65^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 5 hours. Take out and keep it under the environment temperature until it cools down. Then test again the appearance, the insulation function, indicator function and electrical performance.

3.5 Low Temperature Test

Take out the unit from the package and put it in a temperature of $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 8 hours. Take out and keep it under the environment temperature until it become the same temperature. Then test again the appearance, the insulation function, indicator function and electrical performance.

3.6 Damp Heat Test

Take out the unit from the package and put it in a temperature of $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and the humidity of 90%~95% for 48 hours. Then test again the appearance, the insulation function, indicator function and electrical performance.

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3.7 Salt Spray Test

Put the unit under temperature 35°C with 5% NaCl salt spray for 8 hours. Then take out to dry for 16 hours. After that test again the appearance, the insulation function, indicator function and electrical performance.

4 Environmental Conditions

4.1 Operating Temperature

0°C to 40°C

4.2 Storage Temperature

-20°C to 65°C

4.3 Package

Packing: Clamshell

4.4 Transportation

The unit should be protected against raining, watering and strong vibration

5 Safety Standards

6 Product Inspections

6.1 Inspections of all products

Charging current (2.1.2)

LED indicators (1.3)

Foreign object/sound shock

Polarity of charging channel

Surface (3.2)

6.2 Inspections of selected products

Drop test

7 Cautions

Children should use product only under adult supervision.

Mixing batteries of different capacities and sizes, or different technology in the charger when charge cylindrical batteries may result in the charger malfunction and the permanent damage of the batteries .

Due to the charging can't be stopped automatically, pls figure out the charging time and take out batteries timely, otherwise long time charging will damage the battery.

Correctly insert the batteries and avoid reversing the +/- polarities.

Cut off power or take out the battery timely after the batteries are fully charged in case of batteries being damaged

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The charger is intended for use with Ni-MH/NiCd batteries only. Charging the damaged or leaking battery may cause explosions, breakage, personal injury or property damage.

For indoor use only. Keep away from humid and hot places.

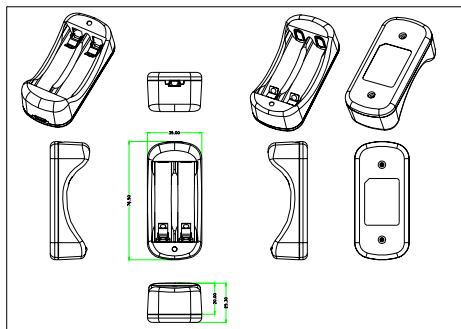
Do not disassemble or reassemble the charger.

8 Charging Time

Estimated charging time= battery capacity ÷ charging current-0.5H

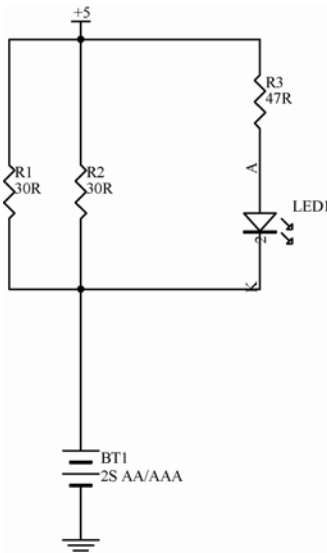
Eg.: to charge a battery with capacity of 1500mah, the total charging time=1500 ÷ 150-0.5H=9.5H

9 Drawings



10 LABEL

11 SCH



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