

## PX-LIR2450 Battery Spec

Model: PX-LIR2450

Stock Code: 900.600.503.254

Customer P/N: \_\_\_\_\_

Nominal Voltage: 3.6V

Capacity: 120mAh

| Draft | Approved     | Customer Confirmation |
|-------|--------------|-----------------------|
| Peter | Chun Qi Zeng |                       |

# POWER-XTRA

Model : Power-Xtra LIR2450 120 Mah Rechargeable Battery (Bulk Package) Ver:A0 NO: 900.600.503.254

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## 1. 适用范围 Applicable Scope

## 2. 产品类型 Type of Products

- 种类: 扣式锂离子充电电池 Type : Lithium-ion rechargeable cell battery
- 型号: LIR2450 Model : LIR2450

## 3. 主要特点 General Features

### 使用寿命长 Long Cycle Life

正常使用条件下, 可循环使用充放电周期 $\geq 500$ 周, 容量 $\geq 80\%$ 。

Under normal usage, the cycle life of the battery can be  $\geq 500$  circles while with capacity  $\geq 80\%$

### 比能量大 High Power Density

高能量密度, 使电池重量轻、体积小, 更适用于小型用电设备。

High power density makes the battery light in weight and small in dimension. It can be used in small devices.

### 使用安全可靠 Safe and Reliable

没有游离的金属锂, 电池使用更安全。

No floating metal lithium assures a safer usage.

### 工作电压高 High working voltage

工作电压高达 3.6V, 大约是镍镉或镍氢电池的 3 倍, 可减小电池的使用数量。

Working voltage is up to 3.6V, approx. 3 times of the voltage of NI-MH or NI-CD, which reduces the quantity of the battery needed in certain application.

### 无记忆效应 No memory effect

无记忆效应, 使其无时不为你提供最大的能量。

No memory effect assures a constant maximum application.

自放电率小 $\leq 7\%$ /月。 Low self-discharge rate :  $\leq 7\%$ /month

### 一致性好 Good Consistency

公司内部按 ISO9000 标准建立质量保证体系, 对生产全过程实行严格控制, 使电池容量、内阻、放电平台、荷电保持能力等性能保持良好的一致性。

Good consistency is showed in battery capacity, internal resistance, discharge platform and capacity retention. A strict complete internal quality control is subject to the ISO9000 system in the company's production.

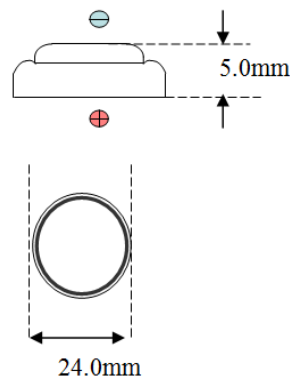
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## 4.规格特性表 Spec Chart

| 项目 Item       | Standard features |           |
|---------------|-------------------|-----------|
| 型号 Model      | LIR2450           |           |
| 额定电压 (V)      | 3.60              |           |
| 标称容量 (mAh)    | 120±10            |           |
| 内阻 (mΩ)       | ≤300              |           |
| 尺寸            | 直径 (mm)           | 24.0±0.15 |
|               | 高度 (mm)           | 5.0±0.2   |
| 重量 Weight (g) | 5.2               |           |



内阻值检测标准：以 0.5CmA 恒流充电，当电池端电压达到充电限制电压 4.25V 后，转为恒压充电，当电流值小于 0.05CmA 时终止充电并搁置 1 小时后，用 1000Hz 内阻仪器进行检测。

Internal resistance test standard:

CC charge 0.5mA / voltage up to 4.25V; Then CV charge.

Terminate charging when the charging current value is less than 0.05CmA.

Rest for 60 minutes, then test the battery by 1000Hz internal resistance tester.

## 5. 电池特性 Battery Characteristics

### 5.1 测试条件 Test Conditions

Temperature 温度: 20°C±1

Relative Humidity: 相对湿度: ≤75%±5

Atmosphere pressure 大气压力: 1atm

### 5.2 放电特性 Discharge Characteristics

在上述条件下测试: The test should be conducted under the condition below:

在环境温度 20±5°C 的条件下，以 0.5CmA 恒流充电，当电池端电压达到充电限制电压 4.25V 后，转为恒压充电，当电流值小于 0.05CmA 时终止充电并放置不超过 1 小时，再以 0.5CmA 电流恒流放电到 2.75V。

In a temperature of 20±5°C, CC charge 0.5CmA / voltage up to 4.25V; Then CV charge.

Terminate charging when the charging current value is less than 0.05CmA.

Rest for no more than 60 minutes,

Discharge CC at 0.5CmA to 2.75V.

### 5.3 充电特性 Charge Characteristics

电池可采用下列方法之一进行充电: The battery can be charged by one of the following methods:

- 标准充电: 在环境温度 20±1°C 的条件下，以 0.5CmA 恒流充电，当电池端电压达到充电限制电压 4.25V 时，改为恒压充电，直到充电电流小于 0.05CmA，停止充电。

**Standard Charge :** Temperature 20±1°C, CC charge at 0.5CmA to 4.25V; turn to CV charge; Terminate charging when the charging current value is less than 0.05CmA.

- 快速充电: 在环境温度 20±5°C 的条件下，以 1CmA 恒流充电，当电池端电压达到充电限制电压 4.25V

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时，改为恒压充电，直到充电电流小于 0.05CmA，停止充电。

**Fast Charge:** Temperature  $20\pm 5^{\circ}\text{C}$ , CC charge at 1.0CmA to 4.25V; turn to CV charge; Terminate charging when the charging current value is less than 0.05CmA.

- 充放电曲线请参阅图 1 和图 2;  
For charging/discharging characteristics at various currents see fig 1 or 2.
- 不同温度放电曲线请参阅图 3;  
For discharging characteristics at various temperatures see fig 3 or 4.
- 自放电曲线请参阅图 4;  
For Storage characteristics see fig 4.
- 循环寿命曲线请参阅图 5。  
For cycle life characteristics see fig 5.

图 1. 不同电流条件下的充电特性

Fig.1 Charging Characteristics at various currents

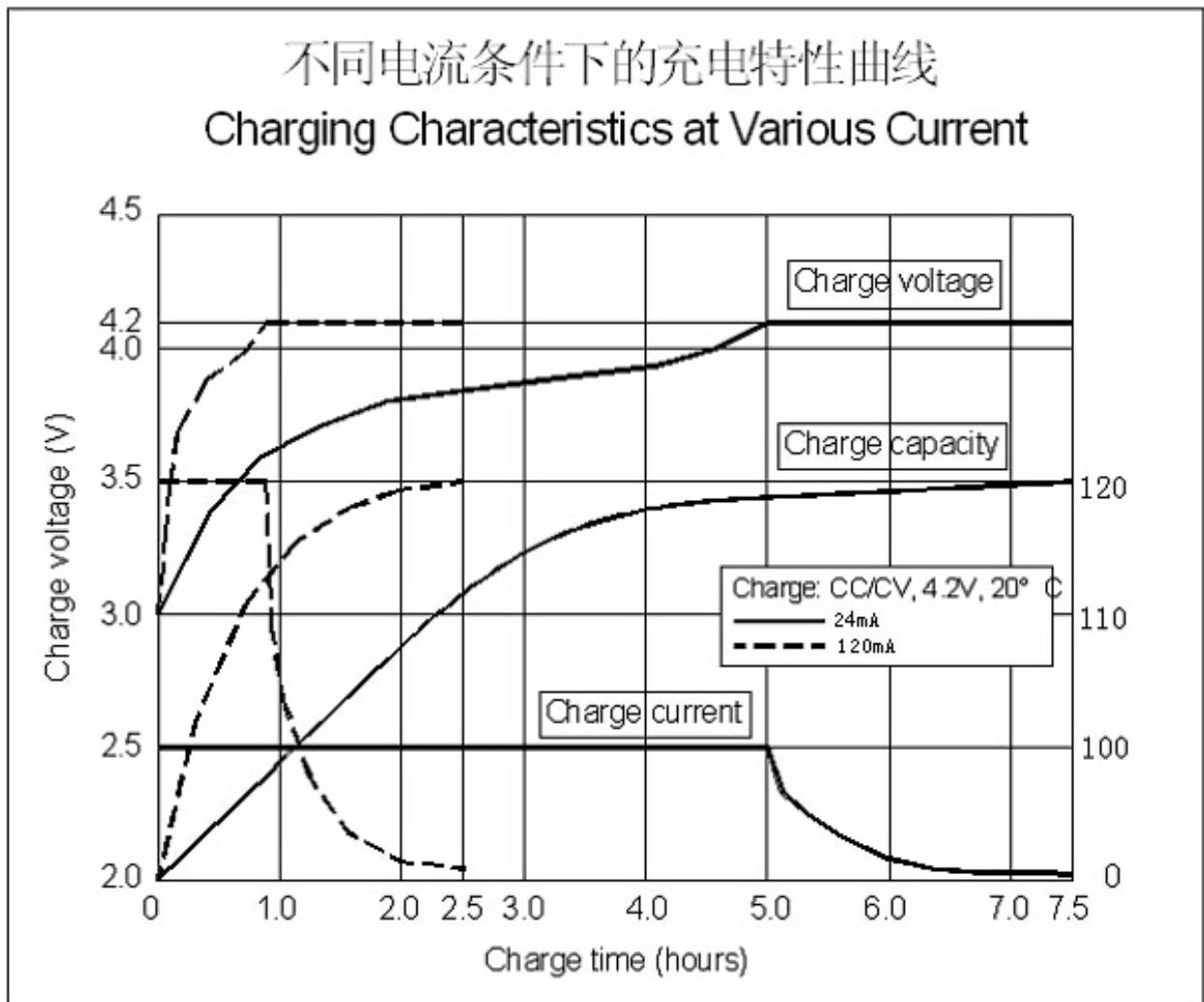


图 2. 不同电流条件下的放电特性

Fig. 2 Discharge Characteristics at various currents

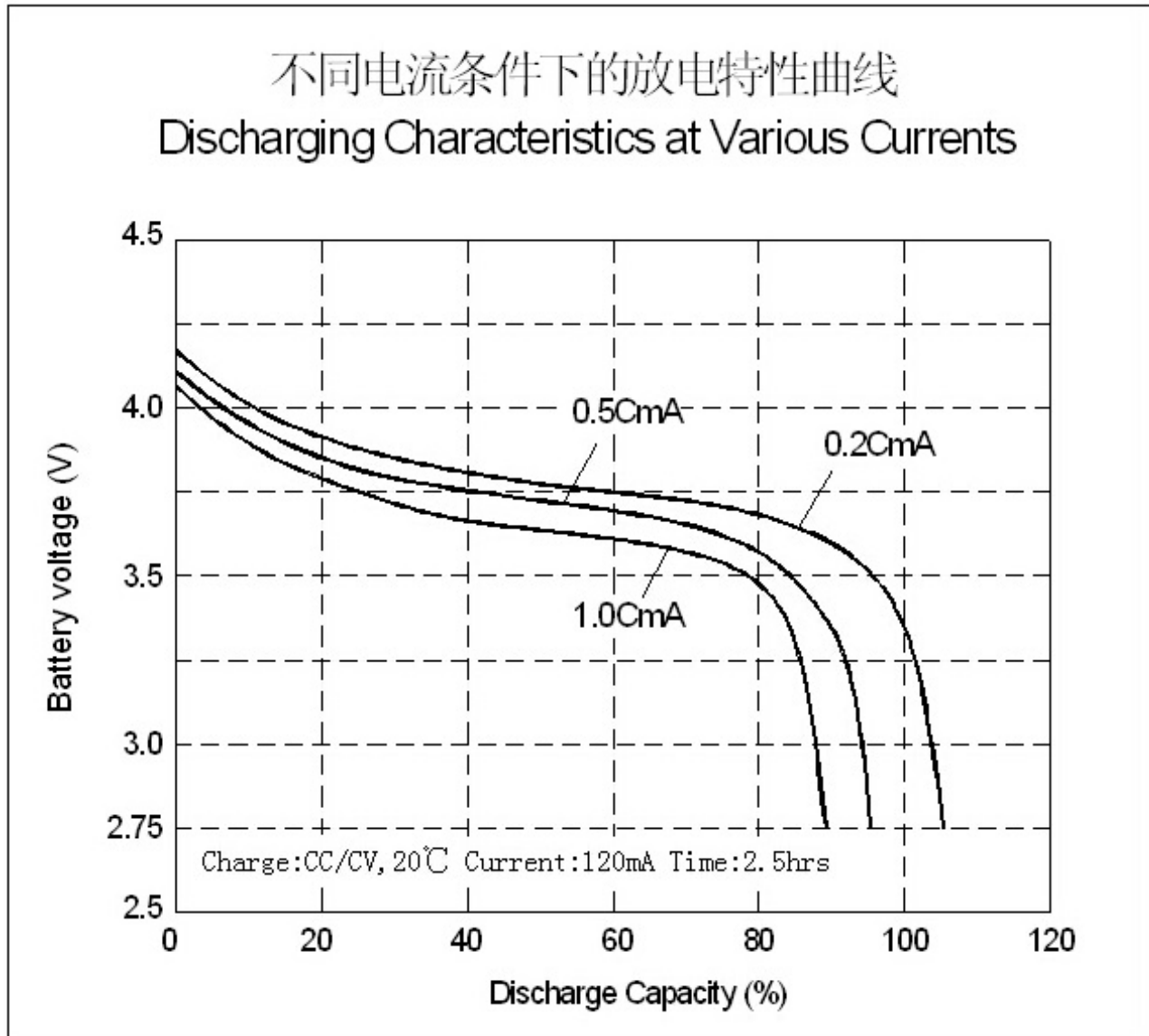


图 3. 不同温度条件下的放电特性

Fig. 3 Discharging Characteristics at various Temperatures

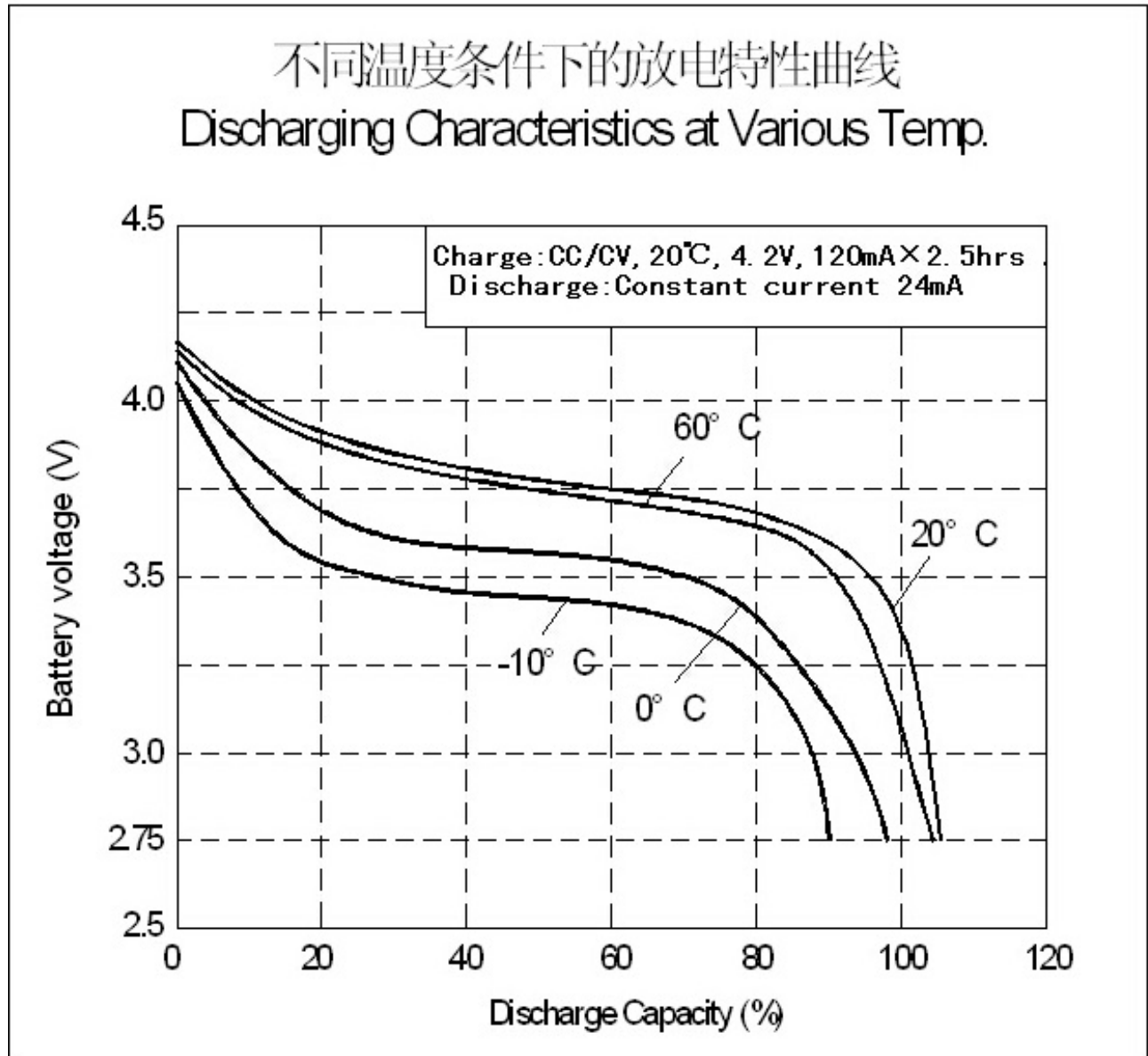




图 4. 自放电保持特性

Fig. 4 Storage Characteristics

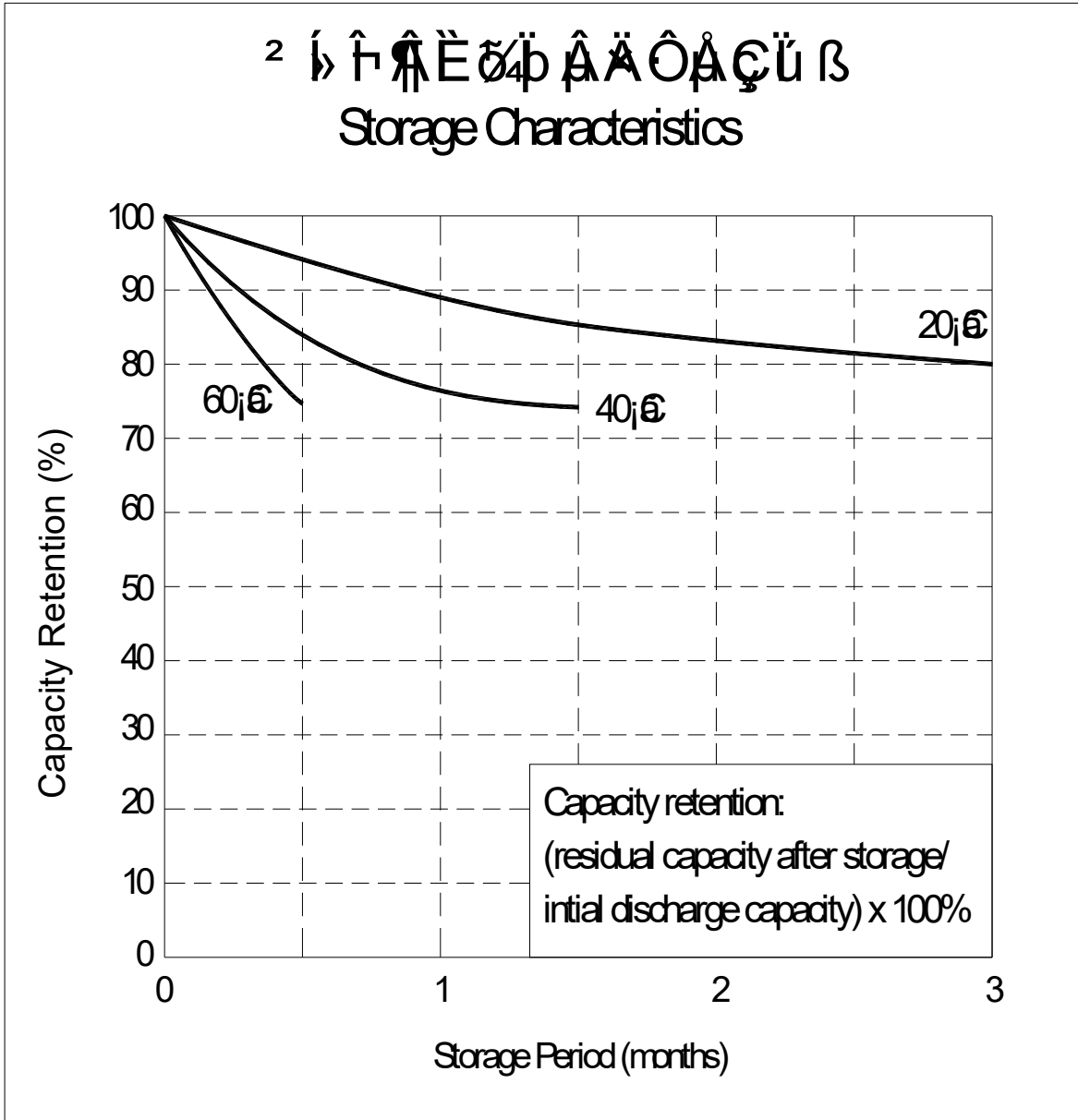
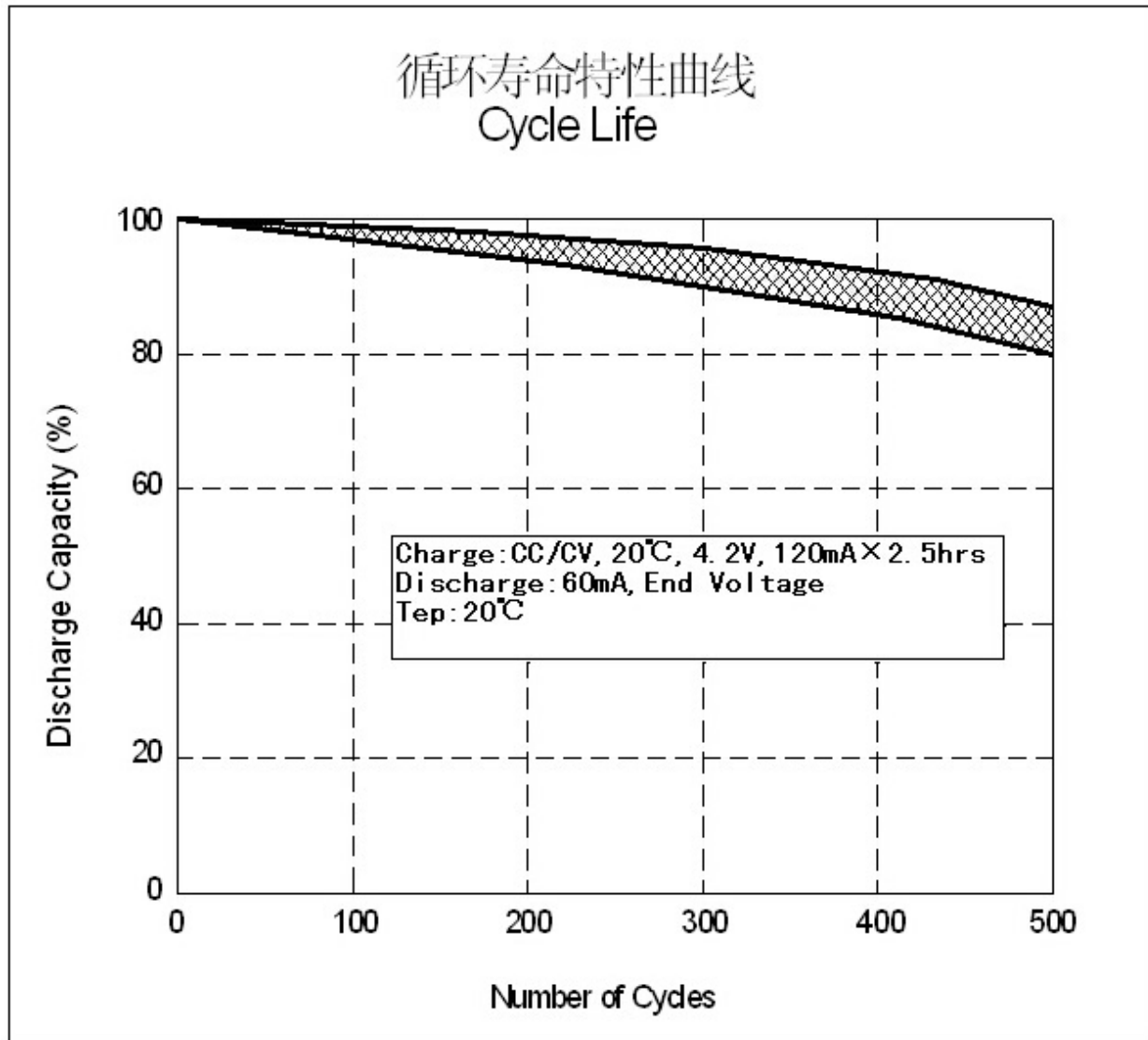


图 5. 循环寿命曲线

Fig. 5 Cycle Life Chart



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## 6. 注意事项 Important Notes

- 远离热源、火源； Keep away from source of fire and/or heat.
- 不要擅自解剖电池或电池组； Do not disassemble battery and/or battery pack.
- 不要将电池的正负极用金属片连接，也不要将电池与能够引起其短路的物品一起混放；  
Do not connect the positive and negative pole directly using conductive metal; avoid short circuit.
- 不要将电池投入水中或弄湿； Do not put the battery into water or damp it.
- 不得抛电池； Do not cut the battery.
- 不得针刺、打击电池； Do not strike or needle the battery.
- 用专用的充电器进行充电； Charge the battery using specified chargers.
- 不要用锡焊直接焊接引线 with 电池连接； Do not solder the battery directly.
- 不要反接电池的正负极； Observe the correct polarity (+/-)
- 不要将电池用于未指定的应用领域； Do not use the battery in un-specified application.
- 不得将电池与干电池或其他类型电池混用； Do not mix the battery in usage with other types of battery.
- 使用电池前应该仔细阅读使用说明书。 Read the instruction manual carefully before use.

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## Packing

托盘整齐摆放，加纸板吸塑（B包装），每箱不超 10KG，加防潮袋，客户定制 Logo 外箱；外箱 Logo 内容格式如下：

# POWER-XTRA

侧唛：

条形码格式为：GS1(EAN.UCC)/ENA-13 Bar code，侧唛分别贴于纸箱两侧（尺寸视纸箱尺寸更改），内容及格式如下：

|               |            |            |
|---------------|------------|------------|
| PO NO.        | Order 131  | ← 根据每次订单更改 |
| MODEL NO.     |            |            |
| QTY           | 500PCS     | ← 根据每箱数量更改 |
| DATE          | YYYY-MM-DD | ← 根据出货日期更改 |
| Made in China |            |            |
|               |            |            |