

锂离子电芯规格书

Specification For Lithium-ion Rechargeable Cell

电芯型号 : N21700CH-58E

Cell Type : N21700CH-58E

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Description: Cylindrical lithium-ion rechargeable cell

说明：圆柱型锂离子二次电芯

Model: N21700CH-58E

型号：N21700CH-58E

3.2 Cell dimensions 电芯尺寸

Cell physical dimensions are showed in Figure 1 (unit: mm), with tube.

电芯尺寸示意图如图 1 所示（单位：mm），带热缩膜。

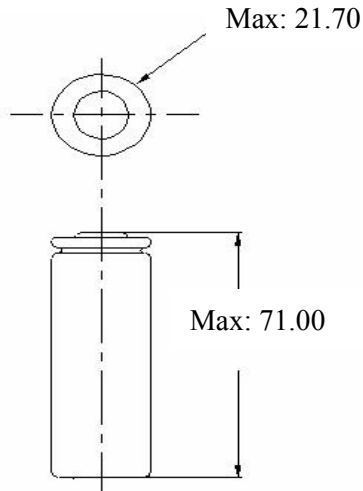


Figure 1/ 图 1

4 Cell characteristics 电芯特性

Unless otherwise specified, the cell should be fresh cell and tested by standard charge and standard discharge.

除非有特殊说明，否则所有样品均为新鲜电芯，且按标准充电和标准放电方式进行测试。

ITEM 项目		SPECIFICATION 规格
Capacity 容量	Rated capacity 额定容量	5600 mAh by standard charge and discharge at 25°C 25°C 下，以标准充放电制式进行充放电，额定容量为 5600 mAh
	Typical capacity 典型容量	5750 mAh by standard charge and discharge at 25°C 25°C 下，以标准充放电制式进行充放电，典型容量为 5750 mAh
Nominal voltage 标称电压		3.6 V
Energy 能量	Rated Energy 额定能量	20.16 Wh
	Typical Energy 典型能量	20.70 Wh

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Limited charging voltage (U_{cl}) 充电限制电压 (U_{cl})		4.20 V	
End of discharge voltage (U_{de}) 放电终止电压 (U_{de})		2.50 V	
Upper limited charging voltage (U_{up}) 充电上限电压 (U_{up})		4.25 V ⁽¹⁾	
Discharge cut-off voltage (U_{do}) 放电截止电压 (U_{do})		2.00 V ⁽²⁾	
Standard charging current (I_{cr}) 标准充电电流 (I_{cr})		0.5C (2800 mA)	
Standard discharging current (I_{dr}) 标准放电电流 (I_{dr})		0.2C (1120 mA)	
Maximum charging current (I_{cm}) 最大充电电流 (I_{cm})		1C (5600 mA, 25°C, not for cycle life 不支持循环)	
Maximum discharging current (I_{dm}) 最大放电电流 (I_{dm})		2C (11200 mA, 25°C, not for cycle life 不支持循环)	
Using temperature range ⁽³⁾ 使用温度范围	Ambient temperature 环境温度	Charge 充电	0 ~ 45°C
		Discharge 放电	-20°C ~ 60°C
	Allowable maximum surface temperature (T_{max}) 可允许的最高表面温度 (T_{max})	Charge 充电	55°C ⁽⁴⁾ (Recommended recharge release \leq 45°C 再次重新充电电芯表面温度要求 \leq 45°C) ⁽⁵⁾
		Discharge 放电	70°C ⁽⁶⁾ (Recommended re-discharge release \leq 60°C 再次重新放电电芯表面温度要求 \leq 60°C) ⁽⁷⁾
Storage temperature 存储温度		1 year: -20~25°C (1年: -20~25°C) 3 months: -20~45°C (3个月: -20~45°C) 1 month: -20~60°C (1个月: -20~60°C)	
Humidity range 湿度范围		0 ~ 60% RH (non-condensing) 0 ~ 60% RH (不冷凝)	
Internal resistance 内阻		\leq 20 m Ω (AC Impedance, 1000 Hz) 交流阻抗测量频率为 1000 Hz, 交流内阻 \leq 20 m Ω	
Weight 重量		\leq 75 g	

Note (1): Cell's upper limited charging voltage shall not exceed 4.25 V to prevent any safety events. And cell performances have negative effect between 4.20 V and 4.25 V. 备注 (1): 电芯的充电上限电压值不得超过 4.25V, 以防发生任何安全事件。同时, 电芯性能在 4.20 V 到 4.25 V 之间会有负面影响。

Note (2): Cell's discharge cut-off voltage shall not drop below 2.00 V to prevent any safety events. And cell