Specification

for

Cylindrical-lithium-ion Battery Cell

Battery Type: ICR18650-2600

1. 前言/ Preface

本标准规定了由深圳市莱劲德科技有限公司生产的圆柱锂离子电芯的技术要求,测试方法及注意事项。

This product specification describes the technique requirements, test procedure and precaution notes of cylindrical type Lithium-ion Rechargeable cell to be supplied to customer by SUNNYBATTCo., Ltd.

2. 说明/ Description

2.1 产品/ Product: 锂离子可充电电芯/ Lithium-ion Rechargeable cell

2.2 电芯型号/ Model (Type): ICR18650-2600

2.3 名称/ Designation: ICR ——— 18 650

① ② ③

2.3.1: ① 代表电池材料体系及形状/ Indicates the chemical material system of cylinder cell

"ICR"代表以镍钴锰酸锂材料为正极材料体系的锂离子可充电电池。

The letters "ICR" define Lithium-ion Rechargeable cell of $LiCo_xNi_yMn_{(1-x-y)}O_2$ series cathode.

2.3.2: ② 代表电芯直径/ Indicates the diameter of cell

18 = 18 mm

2.3.3: ③ 代表电芯高度/ Indicates the overall height of cell

650 = 65 mm

3. 电芯尺寸/ Cell Size

对于图形结构的详细资讯, 请参阅图A.

For details, please refer to Figure A.

Item	Description	Dimensions
H	Height（Bare Cell）	65.3 mm max
D	Diameter（ Bare Cell）	18.4 mm max

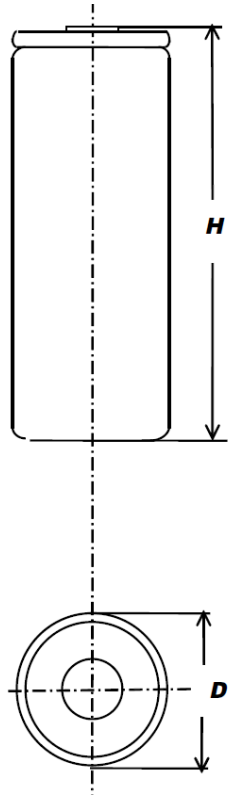

Figure A

4. 电芯结构/ Cell Construction

电芯由正极,负极,隔膜,壳体和盖板组成.

A cell is made of cathode, anode, separator, can and cap.

5. 标准/ Specification

项目/ Item		标准/ Specification		备注/ Remark
5.1 额定容量/ Rated capacity		2600 mAh		Standard charge, 0.5C discharge capacity
5.2 最小容量/ Minimum capacity		2550 mAh		
5.3 交流内阻/ Internal impedance		≤60mΩ		By 1kHz AC
5.4 标称电压/ Nominal voltage		3.7V		
5.5 电芯重量/ Cell weight		Approx. 46g		
5.6 标准充电方式 Standard charge method	恒流/ Constant current	1300 mA		
	充电电压 Charge voltage	4.20V±0.05V		
	截止电流 Cut-off current	52 mA		
5.7 快速充电方式 Fast charge method	恒流/ Constant current	1300 mA		
	充电电压 Charge voltage	4.20V±0.05V		
	截止电流 Cut-off current	52 mA		
5.8 标准放电方法 Standard discharge conditions（0.2C）	恒流/ Constant current	1300 mA		
	截止电压 End-of-charge voltage	2.75V		
5.8 快速放电方法 Fast discharge conditions（0.2C）	恒流/ Constant current	1300 mA		
	截止电压 End-of-charge voltage	2.75V		
5.9 最大持续放电电流 Max continuous discharge current		2600 mA		
5.10 循环寿命 Cycle life		More than 300 cycles at 80% of initial capacity		0.5C charge and 0.5C discharge
5.11 操作温度 Operating temperature	充电温度 Charging ambient temperature	0～45℃		
	放电温度 Discharging ambient temperature	-20～50℃		
	存储温度 Storage temperature	1 year	0～30℃	Note: If the cell is kept as ex-factory status (50 % of charge)
		3 months	-20～35℃	
		1 month	-20～45℃	
5.12 外观/ Appearance		无破裂、划痕、变形、污迹、电解液泄露 No break, scratch, distortion, contamination, leakage.		