

LIR2032

1. Preface

The purpose of this product specification is to provide technical information for the rechargeable Lithium-ion button battery LIR2032, supplied by Guangzhou Markyn battery Co., Ltd.

2. Description and Model

2.2 Model LIR2032

3. Specification

3.1 Rated Capacity 35mAh 3.2 Charging Voltage 4.20V

3.3 Nominal Voltage 3.7V at 0.2C mA

3.4 Constant Charging Method Constant voltage 4.20V Constant current:17mA

3.5 Cut-off Discharge Voltage
 3.6 Max.Discharge Current
 35mA
 3.7 Max.Charge Current
 35mA

3.8 Cycle Life >500 cycles at 1C mA discharge

3.9 Ambient Temperature

for Standard Charge $0 \sim 45$ for Discharge $-20 \sim 60$

3.10 Storage

for within the temperature $-20 \sim 60$ for within the humidity 75%

3.11 Energy Density

Wh/L ~200
Wh/Kg ~90
3.12 Weight of Bare Cell 2.6g
3.13 Charge State Internal Impedance <550m

4. Appearance

Appearance shall be free from any remarkable scratch, flaws, rust, discoloration or electrolyte leakage(visible or by smell)

5.Standard Test condition

5.1 Environment Conditions

Unless otherwise specified, all test stated in this Product Specification are conducted within the temperature 15~25 and the humidity 45~85% RH.



LIR2032

5.2 Test Equipment

(1) Impedance meter

The impedance meter with AC 1kHz should be used

6.Test Procedure and Its Standard

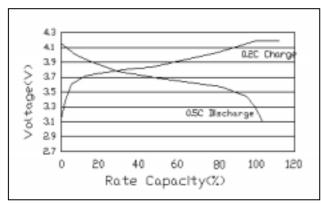
Item	Measureing Procedure	Standard
6.1 Appearance	Visual	No Defect and Leak
6.2 Dimension	Caliper	As item 8
6.3 Weight	Scale	As item 3.12
6.4 Maximum Charge Current	CCCV(Constant Current Constant Voltage)	35mA
6.5 Full charge	CCCV	CC-0.2CmA CV- 4.2V
		total 5hrs
6.6 Open Circuit Voltage	Within 1hr after full charge, measure	>4.15V
	Open circuit voltage	
6.7 Internal Impedance	Measure the battery with 1kHz AC	<550m
6.8 Discharge Capacity	Within 1hr after full charge, discharge until final discharge, at 0.2C mA and	~35mAh
6 0 Maximum Disaharga Current	measure the capacity	35 mA
6.9 Maximum Discharge Current	Until final discharge voltage	
6.10 Charge/Discharge Cycle Life	Charge:CCCV,CC- 0.5CmA,CV- 4.2V for 5hr	Discharge capacity
	Discharge:0.5CmA to 3.00V,This charge/discharge shall be repeated 500 times	should be >70% of item 6.8
6.11 Leakage Proof	After full charging, the battery shall	No leakage should be
	be stored at 40±2 and humidity	observed by visual
	80 ± 5%for 21 days	inspection
6.12 Temperature Characteristics	1)After full charge at 20±5 ,stand at	111000001011
	-20±2 for 18h,then discharge	Discharge capacity
	at 0.2C mA and measure the capacity	
		6.8 and no abnormality
	55±2 for 2hrs ,then discharge	on its appearance and
	at 1C mA and measure the capacity	stucture
6.13 Charge Retension	After full charging, stand at 20±5	Discharge capacity
	for 28 days,measure the discharge	should be>85% of item
	capacity according to item 7.8	6.8

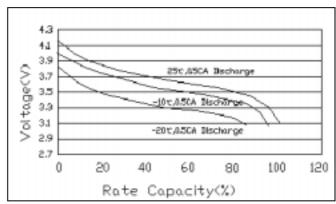


LIR2032

7.1 Charge/Discharge Characteristics Charge:CC/CV 4.2V, 7mA(0.2C)*8hrs Discharge:17mA(0.5C) Cut-off at 3.00V Temperature:25

7.3 Temperature Characteristics Charge: CC/CV 4.2V 0.2CA*8hrs Discharge:0.5CA,Cut-off at 3.00V





7.2 Charge/Discharge Cycle Life Charge:CC/CV 4.2V , 0.5CA*5hrs Discharge:0.5CA,Cut-off at 3.00V Temperature:25

110 Rate Capacity(7:) 100 90 80 70 60 50 40 30 20 10 600 100 300 400 Number of cycles(times)

8. Dimension(Bare cell) mm

