

Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	1/7

# EEMB BATTERY

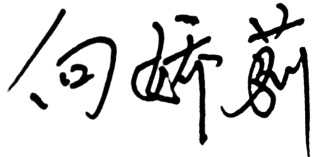


## Li-ion Capacitor

### Specification

电容

产品规格书

Model 型号:	HR1520
-----------	--------

Prepared 编制	Checked 审核	Approved 批准
		

Customer 客户名称:

Customer Approval (Customer confirmation) 客户确认:

Address: 6/F, Block 110, Jindi Industrial Zone, Sha Tou Street, Futian District, Shenzhen, China

Postal code: 518048

Phone: +86-755-83022275

FAX: +86-755-83021966

<https://www.eemb.com>



Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	2/7

### Catalog

Chapter	Content	Page
0	Catalog.....	2
1	Scope.....	3
2	HR1520 Capacitor Performance Parameter.....	3-4
3	Performance Data.....	4-6
4	Safety.....	6
5	Warning.....	7

Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	3/7

## 1. Scope 适用范围

This product specification defines the requirements of the HR1520 capacitor supplied to the customer by EEMB Co., Ltd.

本产品规格书适用于 EEMB 提供的 HR1520 电容。

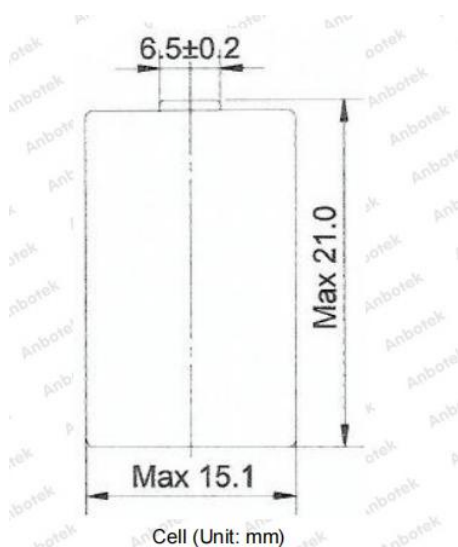
## 2. HR1520 Capacitor Performance Parameter HR1520 电容性能参数

Item 项目	Characteristics 特性		Remark 备注
Physical Characteristics 物理特性	Length 长度	Max21.0mm	
	Diameter 直径	Max15.1mm	
	Weight 重量	7.4±0.3g	
Discharge Capacity (Room Temperature) 放电容量 (室温)	Nominal capacity 标称容量	39mAh	
	Nominal Voltage 标称电压	3.7V	
	Discharge End-off Voltage 放电终止电压	2.5V	Discharge at 20°C, when voltage is lower than 2.5V or discharge at -40°C, when voltage is lower than 2.0 V, the internal resistance of HR is increased. 在 20°C 放电低于 2.5V 或在低温 -40°C 放电低于 2.0V 时, 会增加 HR 的内阻。
标准放电电流 Nominal Discharge Current	Continuous 连续	50mA	
Max. Discharge Current 最大放电电流	Continuous 连续	0.5A	
	Pulse 脉冲	2.0A	
Max. Charging Voltage 最大充电电压		3.95V	
Nominal Charge Current 标准充电电流		20mA	
Charge cut-off current 充电截止电流		5mA	
Max Charging Current 最大充电电流		50mA	
Shelf Life (Reversible Capacity) 保质期 (可逆容量)	Storage Temp. 储存温度	HR Used Independently HR 独立使用	HR for Pulse-enhanced Batteries HR 使用于脉冲增强型电池
	20°C	3 year	10 years
	60°C	4 weeks	7 years
	80°C	1 week	Not less than 1 year
HR can reach 80% of the initial reversible capacity at different storage temperatures HR 在不同储存温度下能达到初始可逆容量的 80%			

Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	4/7

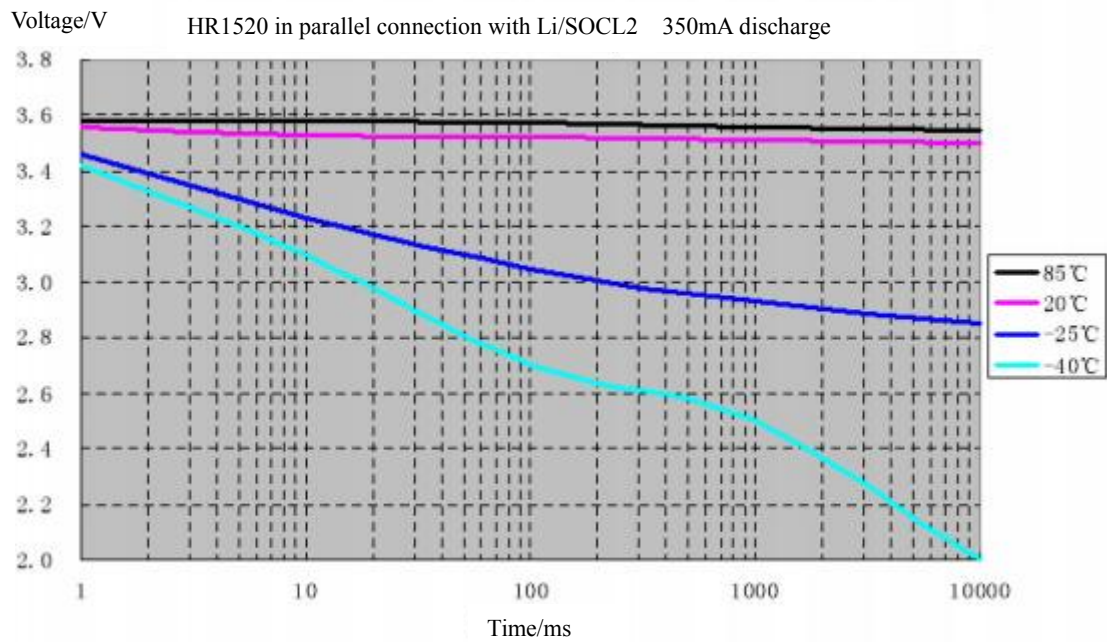
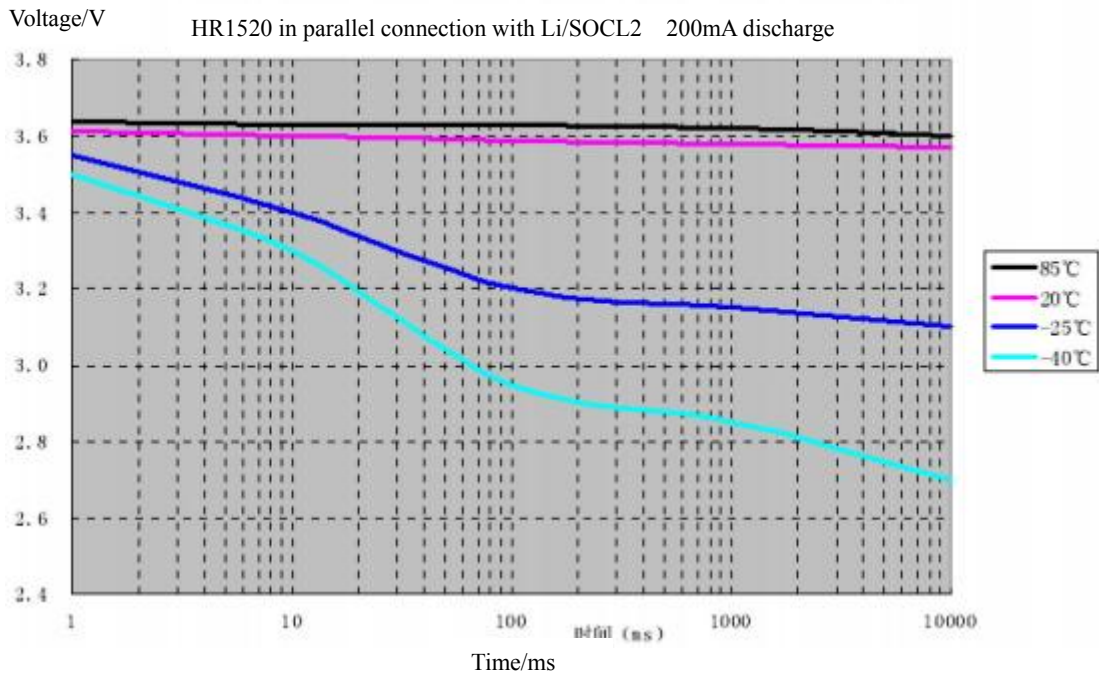
Self-discharge Rate 自放电率	20°C	1 uA			Self-discharge of HR at different storage temperatures HR 在不同储存温度下的自放电
	80°C	5 uA			
Charge and Discharge Characteristics 充放电特性		100% Discharge Depth 放电深度	10% Discharge Depth 放电深度	1% Discharge Depth 放电深度	Charge and discharge times which reach 80% of the initial capacity 达到初始容量 80% 的充放电次数
	Charge to 充电至 3.67V	4000	40000	400000	
	Charge to 充电至 3.90V	1000	10000	100000	
Impedance 电池阻抗	< 250 mΩ				20°C@1KHz
Working Temperature 工作温度	Charge temperature 充电温度		0°C ~ 60°C		
	Discharge temperature 放电温度		-40°C ~ 60°C		
Storage Temperature 存储温度	Used Independently 独立使用		-30°C ~ 60°C		
	For Pulse-enhanced Batteries 使用于脉冲增强型电池		-30°C ~ 60°C		

### 3. Construction 尺寸图



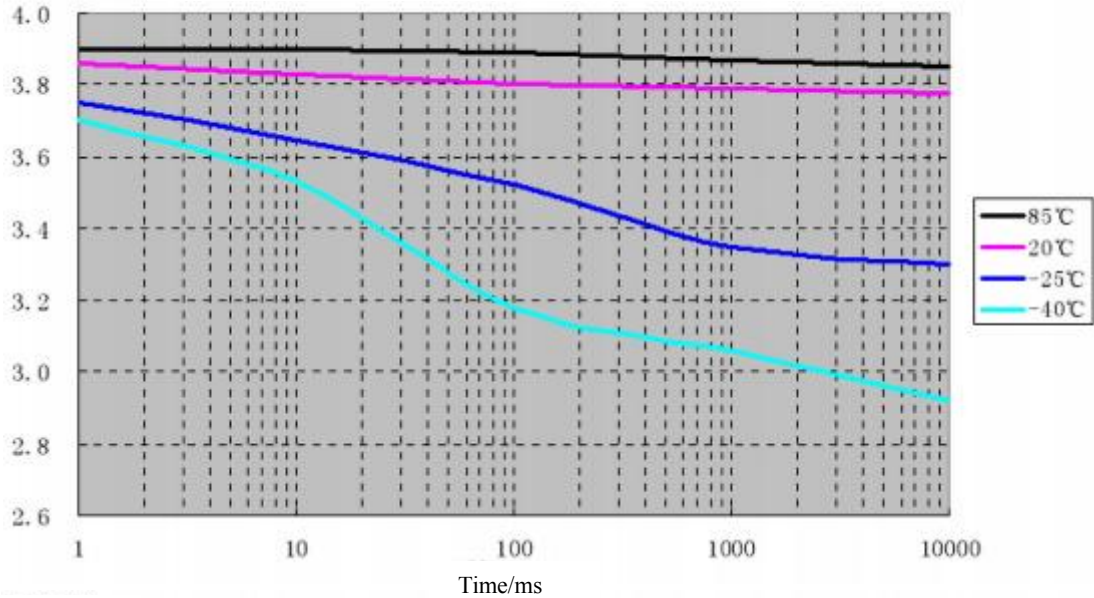
Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	5/7

#### 4. Performance Data 性能数据

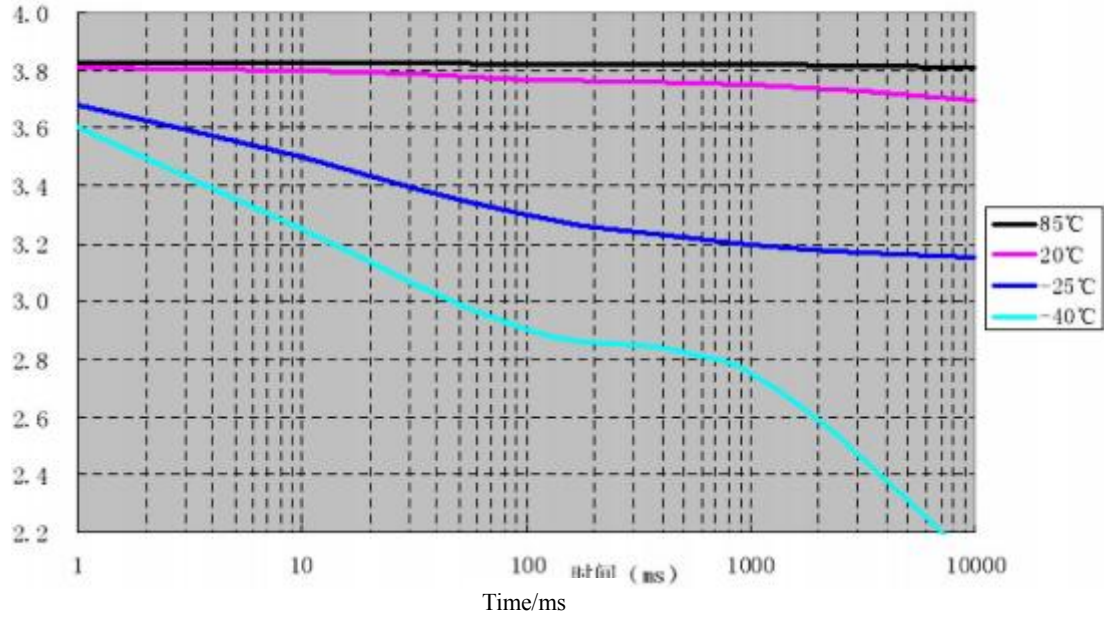


Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	6/7

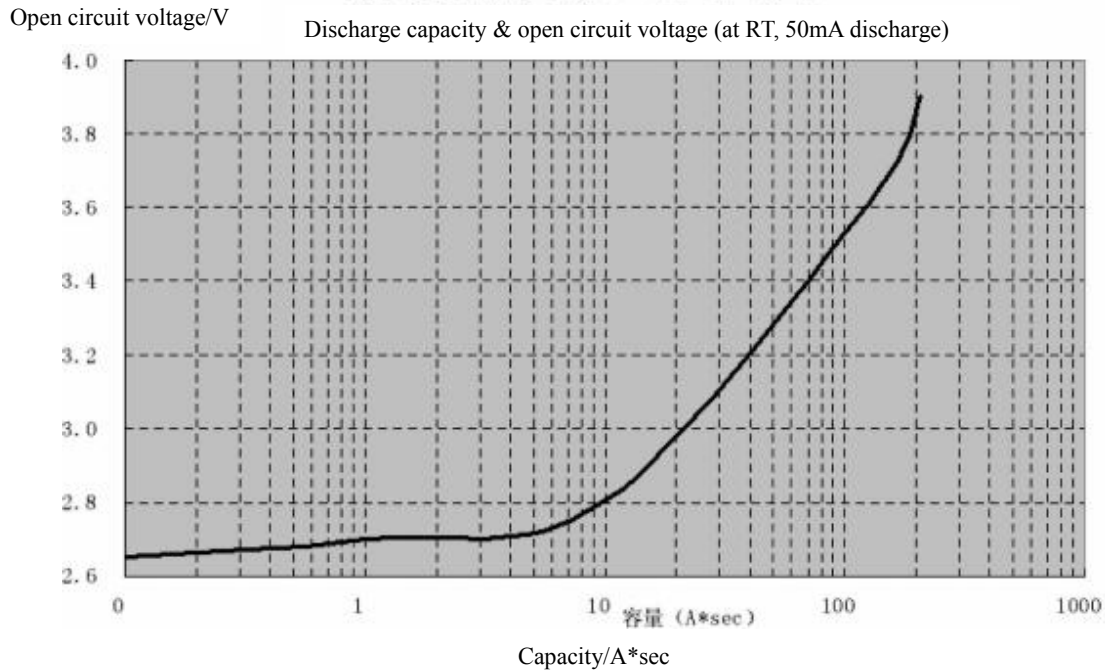
Voltage/V HR1520 in parallel connection with Li/SO<sub>2</sub>CL<sub>2</sub> (3.90V) 200mA discharge



Voltage/V HR1520 in parallel connection with Li/SO<sub>2</sub>CL<sub>2</sub> (3.90V) 350mA discharge



Document Name	Document No.	Date	Page
HR1520 Specification	ZJQM-RD-SPC-H2472	2024-5-14	7/7



## 5. Safety 安全性

HR1520 safety performance fully meets the requirements of UL1642.

HR1520 安全性能完全符合 UL1642 的相关要求。

There are no air transportation restrictions and meet the relevant requirements of UN38.3.

没有空运限制，符合 UN38.3 的相关要求。

## 6. Warning 警告

- ✓ HR can only be used in pulse-enhanced batteries or low charge current devices. Explosion or leakage may occur if charging exceeds 4.1V.
- ✓ HR 只能用于脉冲增强型电池或低充电电流装置内，充电超过 4.1V 可能会发生爆炸或泄露。
- ✓ Charging above 4.1V will result in a decrease in discharge capacity or an increase in impedance.
- ✓ 充电超过 4.1V 会导致放电容量减少或阻抗增加。
- ✓ Do not overcharge, over-discharge, short circuit, heat more than 100°C, do not incinerate or put in water.
- ✓ 不要过充，过放，短路，加温超过 100°C，不要焚烧或置于水中。

EEMB reserves the final explanation. Please use battery strictly according to specification. EEMB will not be responsible for any inappropriate operation. EEMB keeps the right to change product specifications without previous notice. If any question, please consult with the manufacturer

EEMB 保留最终解释权。请严格按照规范使用电池。EEMB 对任何不当操作将不负责。EEMB 保留修改产品规格书不另行通知的权利。如有任何问题，请咨询制造商。