



★秘 密★

文件名称:	C13-125Ah电池产品规格书			项目编号 (可选)	BYDC13
文件编号:		版本:	1	页 码:	4 / 6

C13-125Ah Lithium Ion Battery Specification

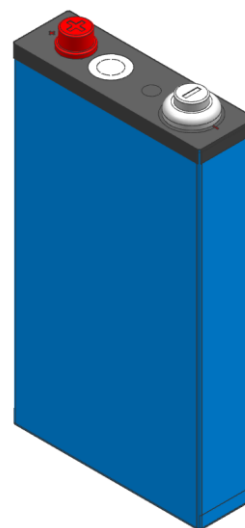
❖ Battery Type : C13

❖ Features

- LiFePO₄ as cathode material
- Excellent safety, long life time
- Good temperature performance and large operating temperature range
- High energy density
- Environment friendly

❖ Certification

- UN38.3
- UL1642



Nominal characteristics		Cell dimensions	
Nominal Voltage	3.20 V	Length	272 mm
Capacity	125 Ah	Width	147 mm
Energy	400 Wh	Thickness	44 mm
Charge Method	Constant Current/ Constant Voltage	Weight	3.45 Kg
Charge Current	125A @ 23°C (Standard) 187.5A @ 23°C (Max. Continue Current) 375A/10s (Peak Current)	Abuse test (GB31485)	Test result (based on EUCAR)
Charge Cut-off	3.80V/Cell	Crush	Pass-L4a
Discharge Method	Constant Current	Overcharge	Pass-L4a
Discharge Current	125A @ 23°C (Standard) 375A @ 23°C (Max. Continue Current) 500A/30s (Peak Current)	Over-discharge	Pass-L2
Discharge Cut-off	2.00V/Cell	External short	Pass-L2
Shipment Voltage	3.30V~3.40V	Oven	Pass-L4a
Shipment SOC	60%		

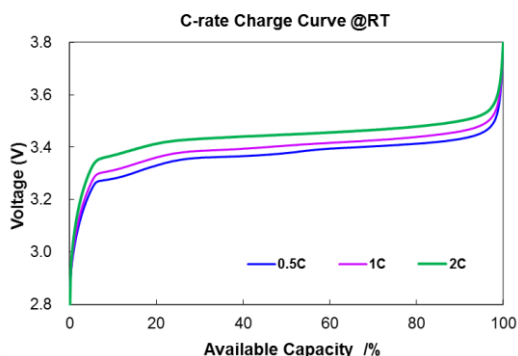


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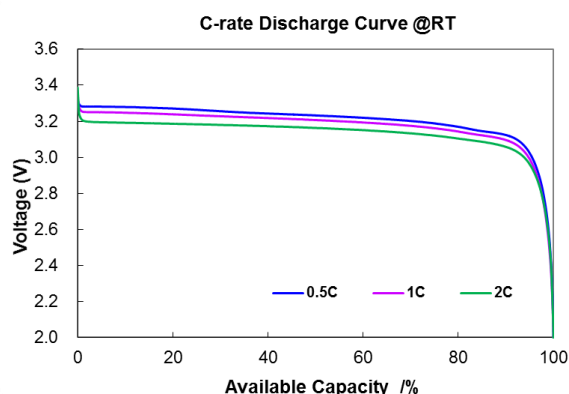
❖ Charge at Different Rate

After fully discharged at $23\pm2^{\circ}\text{C}$ with 0.5C discharge current, the cell is charged at different C-rate to 3.80V.



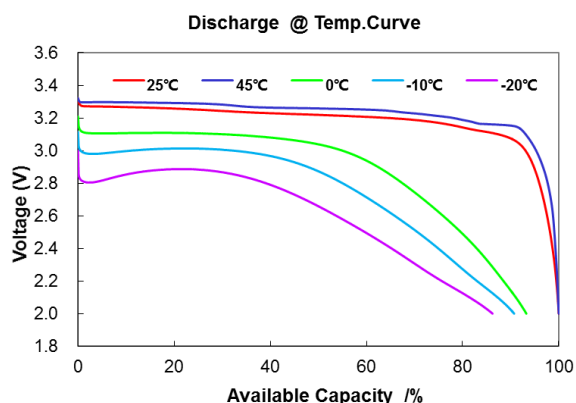
❖ Discharge at Different Rate

After fully charged at $23\pm2^{\circ}\text{C}$ with 0.5C charge current, the cell is discharged at different C-rate to 2.00V.



❖ Discharge at Different Temperature

After fully charged at $23\pm2^{\circ}\text{C}$ with 0.5C charge current, then keep the cell at different temperature for 8 hours. The cell is discharged to 2.00V with 0.5C.



❖ Safety Instructions

• Operating & Storage Conditions

Charge Temperature	-20~+60°C
Discharge Temperature	-20~+60°C
Normal Storage	+35 ~+45°C (<3 months, 20~60% SOC)
Long Term Storage	-20~+35°C (<1 year, 20~60% SOC)
Storage Humidity	5%~95%
Elevation	≤4000m

• Necessary Protection Functions

During charge and discharge cycles, the charger and the protection circuit should be satisfied the following items to insure the safety. (*BYD suggested)

No.	Items	Condition
1	Charge Cut-off Voltage	3.80 V/Cell
2	Discharge Cut-off Voltage	2.00 V/Cell
3	1st Over Charge Protective Voltage	3.81V~3.90 V/Cell
4	2nd Over Charge Protective Voltage	*3.91V~4.00 V/Cell
5	Over Charge Release Voltage	3.50V~3.60 V/Cell
6	1st Over Discharge Protective Voltage	1.90V~1.99 V/Cell
7	2nd Over Discharge Protective Voltage	*1.80V~1.89 V/Cell
8	Over Discharge Release Voltage	2.50V~2.80 V/Cell
9	Over Temperature Alarm	56°C
10	Over Temperature Protective	60°C

• Cautions

- 1 Never throw out battery in a fire or expose to high temperatures. Move away from the fire.
- 2 Do not disassemble, crush, short or install with incorrect polarity. Avoid mechanical or electrical abuse.
- 3 Do not use the battery with other maker's batteries, different types and /or models of batteries.
- 4 Do not disassemble or alter the batteries' outside structure. Do not impact or penetrate the cell.
- 5 Incompatible products: Conductive materials, water, sea-water, strong oxidizers and strong acids.
- 6 Avoid direct sunlight, high temperature, and high humidity (temperature≤65°C, humidity≤95%).
- 7 Wear neoprene or nature rubber gloves if handling a cell.
- 8 Insure the cell has necessary protection and monitoring to voltage, current and temperature of the cell.
- 9 In case of smoking or electrolyte spilled, cell damaged, stop using the cell immediately and the contact BYD to dispose.