



LI-ION POLYMER BATTERY

S3E⁺-85190200-1

PRODUCT FEATURES



Excellent Anti-interference

Stable output even in a high-frequency environment



Adaptability to Temperature

No exterior change under fix hot and humid condition and variable temperatures



Effective IC Discharge Rate

98% capacity can be released under 1C discharge rate (vs 0.5C)



Cost-effectiveness

Higher performance compared to products at similar prices



High Energy Density

Energy density reaches 250Wh/kg



Stable Performance & Long Cycle Life

Slow fading, over 2000 cycles


ABOUT US

With IBM-LEO electrochemical system lithium battery technology, and IBM-Sidus joint R&D system, Sidus will continue to innovate to maintain and improve the global leading position of product performance. Based on the super technology of high-performance electrochemical system, Sidus will continue to launch ultra-high performance products, while taking into account the continuous improvement of product performance of traditional chemical system.

Sidus adheres to the business philosophy of "attending to every consideration of customers or considerations they haven't thought about yet, and providing high-performance products to solve difficulties for the industry", is committed to be a gigafactory of lithium battery manufacturing.



IEC 62133, EN62133
REACH-197
MSDS, UN38.3

 www.sidusenergy.com

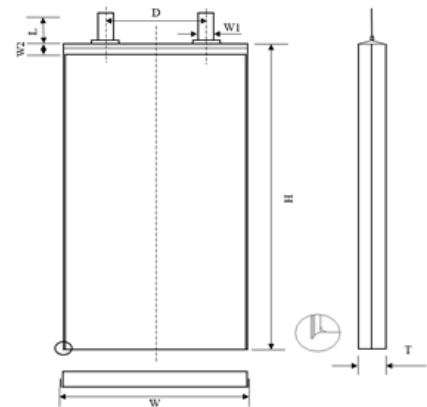
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TECHNICAL PARAMETER OF CELL

Item	Specification	Remark	
Capacity	42Ah (Min.)	0.5C Discharge	
	43Ah (Typ.)		
Nominal Voltage	3.75V		
Resistance	≤1.5mΩ	50%SOC, 1KHz	
Standard Charging Current	21A	0.5C	
Max.Charging Current	42A	1.0C	
Charging Cut-off Voltage	4.35V	CV to 0.025C	
Max. Constant Discharge Current	84A	2.0C	
Discharge Cut-off Voltage	3.0V		
	Temperature Range for Operation	Charge : 0°C~15°C	0.2C
		15°C~55°C	Standard charge
	Discharge : -20°C~60°C		
Temperature Range for Storage	-10°C~+35°C	≤1 Month	
	-5°C~+30°C	1~6 Month	
	0°C~30°C	≥6 Month	

PRODUCT APPEARANCE AND SIZE

Item	Code	Specification
Thickness of the Battery	T	8.5mmMAX
Width of the Battery	W	190mmMAX
Height of the Battery	H	200mmMAX
Length of the Tabs	L	21±1mm
Width of the Tabs	W1	50±0.2mm
Spacing Between Tabs	D	117±1mm
Width of the Terrace	W2	15±0.5 mm
Folding Way	Single ruffled	
Appearance	Battery no scratches, dirt, deformation, surface defects such drum leakage	
Note	Battery comply with ROHS standards	



OPERATING INSTRUCTIONS AND MATTERS NEEDING ATTENTION

1.Storage

Batteris must be stored within -10~45°C . If there needs a long time(over 3 months) storage without operation , 23±5°C temperature and 65±20% humidity should be ensured. OCV of batteries must be in the range of 3.65~3.85V.

2. Matters Needing Attention

A.Packing foil

Packing foil is easily damaged by sharp parts, such as nickel, pointed needle.Sharp parts collision battery is prohibited. Clean work environment to make sure no any sharp component.

B.Top sealed edge

Sealing edge is very easy to be damaged. Don' t bend or fold sealing edge.

C.Folding edge

The folding edge is formed in battery manufacture process and passed all hermetic test. Don't open and deform folding edge.

D.Tabs

The battery tabs are not so firm especially the aluminum tab.Don' t bend tab.

E.Mechanical shock

Don't drop, hit, bend battery body.

F.Short circuit

Short circuit of battery is strictly prohibited at any time, it may damage battery very badly.

G.Notice of Designing Battery Pack

The outer shell of the Battery should have sufficient strength and cell should be protected from mechanical shock.

H.Cell connection

Ultrasonic welding or spot welding is recommended to connect battery with PCM or other parts.

Note: This datasheet is not legally binding. Sidus Energy Co., Ltd. reserves the right to adjust specifications without notice. Further information please refer to our Website. If you have any objections to the test items or methods, please contact [Sidus Energy Technology Co., Ltd.](#) to resolve.