

Product Specifications: Lithium Ion 3.7V / 2200mAh - BP-LI-3-CT132

Battery Type:		Lithium Ion Rechargeable			
Part Number:		BP-LI-3-CT132			
Battery Specification:		3.7V / 2200mAh			
Ver:		1/TWL			
Issue Date:		24/01/07			
Prepared By	Date	Checked By	Date	Approved By	Date
Customer confirmation:					Date
Note: 1. Please sign above and return on approval. 2. Kindly contact us as soon as possible if the sample is not approved.					

History of revisions		
Prepared by	Approved by	Date

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1. SCOPE

This specification describes the related technical standard and requirements of the BP-LI-3-CT132 rechargeable Li-ion battery pack.

2. BATTERY SPECIFICATIONS			
ITEM	SPECIFICATION		REMARK
Model	BP-LI-3-CT132		
Constant Voltage	3.7V		
Capacity	Typical	2200mAh	
	Minimum	2200mAh	
Dimensions	Φ 18.0(±0.4) x 64.5(±0.6)mm		Bare cell
Weight	40.0(±2)g		

3. STANDARD TESTING CONDITIONS (NO LOAD)			
ITEMS	REGISTER		
Standard charge	CC/CV model, constant voltage 4.2V, constant current 0.2C, end current 0.01C		
General charge.	CC/CV model, constant voltage 4.2V, constant current 0.5C, end current 0.01C		
Standard discharge	Constant current 0.2C, end voltage 3.0V		
General discharge	Constant current 0.5C, end voltage 3.0V		
Environment temperature	Charge	0 -- +45°C	
	Discharge	-20°C -- +60°C	
	Storage temperature	One month	-20°C -- +55°C
		Three months	-20°C -- +45°C
		One year	-5°C -- +30°C
	General temperature	20°C ± 5°C	
	Atmospheric pressure	86 -- 106Kpa	
Relative humidity	45% -- 85%		

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4. APPEARANCE		
ITEMS	TEST CONDITION	REQUIRE
APPEARANCE	Under light lamp 40W	Shall be free noticeable flaws breaks, age, Discoloration, deformation, uneven, and other Defects which impair the value of the commodity

5. ELECTRICAL CHARACTERISTICS		
ITEMS	TEST CONDITION	REQUIRE
Complete Charge	The battery is charged with constant current 1CmA and constant voltage 4.2v until the charging current is less than 0.01CmA. The longest charging time is less than 3 hours.	
Initial capacity	The capacity measured after the battery is discharged with constant current 0.2C until the voltage reaches 3.0V cut-off in one hour after complete charge.	2200mAh
Cycle life	The capacity measured after 300 cycles of complete charge and discharge at 1C current to 3.0V cut-off.	Capacity more than 70% of Initial capacity
Impedance	Internal resistance measured at 1KHz after complete charge.	≤70m Ω

6. TEMPERATURE CAPABILITY		
ITEMS	TEST CONDITION	REQUIRE
High temperature discharge	After complete charge, at 60°C , discharging current 0.2C to 3.0V-END discharge.	No explosion, fire, or smoke. Discharge efficiency ≥85%.
High temperature exposure	After relative charge, all batteries being tested are stored in chamber of 150°C for 0.5 hour. After taking the batteries out of the chamber, all the batteries are visually examined.	No explosion, fire, or smoke.
Low temperature discharge	After complete charge. At -20°C , discharging current 0.2CmA to3.0V-END discharge.	No explosion, fire, or smoke. Discharge efficiency ≥80%.

7. DESTRUCTION CAPABILITY		
ITEMS	TEST CONDITION	REQUIRE
E.S.D TEST	To apply 33 Ω resistance and stasis Electricity energy of 1500PF capacitor. To All terminals (+, -) apply the below for 10 times each, 1. Contact : $\pm 8KV$ 2. Air : $\pm 15KV$	No malfunction. No damage.
Vibration Test	Subject to 1 hour 10-55Hz 3.5mm amplitude Vibration for any direction at shipment (complete packing) state. Then test discharge and rated charge at $25 \pm 2^{\circ}C$.	No explosion, fire, or Smoke. No leakage or damage
Drop Test	Drop test battery 1.2m above steel board of more than 10mm thickness. One time drop each for 6 surface, 4 ride direction of a battery pack	No leakage or damage No explosion, fire or Smoke. Discharge time Less than 50 minute.

8. DIMENSIONS:

Cell physical dimension listed in Table 1. The location of physical dimension of cell listed in Figure 1.

Table 1

Cell diameter(mm)		Cell length(mm)	
Min.	Max.	Min.	Max.
18.00	18.40	64.5	65.1

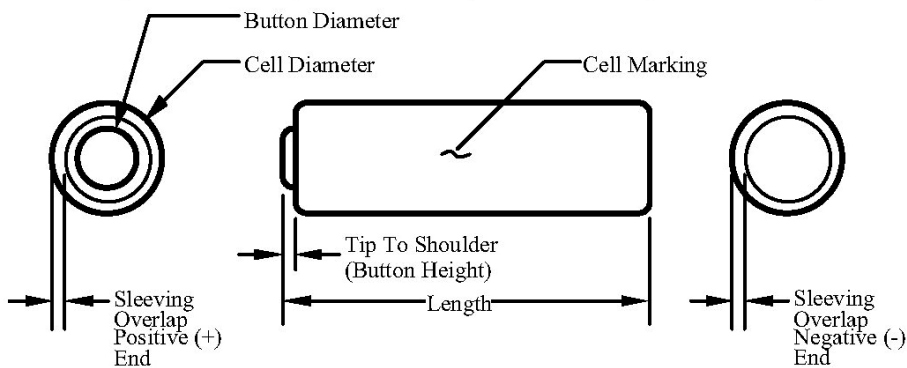


Figure 1.

9. CAUTIONS

To ensure proper use of the battery please read the manual carefully before using it.

Handling

- Do not expose to, or dispose of the battery in fire.
- Do not put the battery in a charger or equipment with wrong terminals connected.
- Avoid shorting the battery
- Avoid excessive physical shock or vibration.
- Do not disassemble or deform the battery.
- Do not immerse in water.
- Do not use the battery mixed with other different make, type, or model batteries.
- Keep out of the reach of children.

Charge and discharge

- Battery must be charged in appropriate charger only.
- Never use a modified or damaged charger.
- Do not leave battery in charger over 24 hours.

Storage

- Store the battery in a cool, dry and well-ventilated area.

Disposal

- Regulations vary for different countries. Dispose of in accordance with local regulations.



USERS MUST ENSURE THAT THEY SATISFY THEMSELVES AS TO THE SUITABILITY FOR PURPOSE OF THIS PRODUCT.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



ANY OTHER ITEMS WHICH ARE NOT COVERED IN THIS SPECIFICATION SHALL BE AGREED BY BOTH PARTIES.