Technical Specification of ER26500H

1. Scope of application

   This product specification is applicable to Akyga battery. Hereinafter referred to as Akyga ER26500H lithium thionyl chloride battery. It specifies the product's performance indicators, test methods, quality control, and precautions for use, etc.

2. Product type

   Lithium thionyl chloride battery

3. Basic features

Table 1

Item	Subject	Features	Remark
3.1	Specification	ER26500H	Carbon - clad, stainless steel shell, fully sealed structure
3.2	Norminal voltage	3.6V	
3.3	Norminal capacity	8500mAh	2mA, 25±3℃，cut-off at 2.0V
3.4	Max. continuous discharge current	100mA	
3.5	Max. available pulse current	200mA	
3.6	Operating temperature	-55℃~+85℃	When the operating temperature is higher than normal temperature, it may result in a decrease in the capacity at the beginning of the pulse and a low voltage reading. If the continuous temperature is higher than +40℃ or lower than -20℃, please consult Akyga
3.7	Dimension	Φ26.2x50.0	See attached figure
3.8	Standard weight	About 53g	
3.9	Annual self-discharge rate	≤1%	25±3℃，RH 65±10%

4. Appearance and Structure

   4.1 Appearance

   The ER26500H battery mark is intact, there is no exposed metal in the area covering the mark, the parts do not fall off, and the surface has no signs of scratches, swelling, deformation, corrosion, and electrolyte leakage.

   4.2 Structure

   The battery cell is composed of "carbon-packed" motor technology. In order to ensure the excellent sealing performance of the battery cell, the ER26500H adopts glass/metal sealing

technology.(At a standard helium pressure, the leakage rate≤10^{-9}Pa. m^3/sec)

5. Typical electrical performance values

Table 2

Subject	Test Conditions	Nominal Data
Open circuit voltage	25±3℃	≥3.64V
Discharge capacitance 1	25 ± 3 ℃ , 100mA/33Ω, cut-off voltage 2.0V, the positive pole is placed upright	≥4500mAh/45h
Discharge capacitance 2	25 ± 3 ℃ , 50mA/62Ω, cut-off voltage 2.0V, the positive pole is placed upright	≥6500mAh/130h
Load voltage	25±3℃, 200Ω, within 10s	≥3.20V

6. Inspection items, sequence, sampling method and capacity judgment basis

6.1 Inspection items, sequence, sampling method

Table 3

Serial number	Content of Inspection Item	Sampling plan（Based on GB2828.1 2012）	
		Test level	AQL
6.1	Open circuit voltage	Ⅱ	0.065
6.2	Load voltage	Ⅱ	0.065
6.3	Appearance	Ⅱ	1.0
6.4	Dimension	S-1	1.0
6.5	Capacity test	Since the test is a destructive test, the customer can decide the sampling plan according to the actual situation	

Mark: Unless otherwise objected, the above tests should be completed within 45 days of receipt of the battery

6.2 Basis of capacity judgment

6.2.1 When the average discharge capacitance is not lower than the standard value specified in table 2. When the number of batteries less than 90% of the standard value is 0, the battery capacitance is determined to be qualified.

6.2.2 When the average discharge capacitance is less than the standard value specified in Table 2, or the number of batteries less than 90% of the standard value is greater than 0, a new sample is drawn for inspection. If the average discharge capacitance is not less than the standard value specified in Table 2, and the number of batteries less than 90% of the standard value is not greater than 0, the battery capacitance will be determined to be qualified

6.2.3 If in the experiment of 6.2.2, the average discharge capacitance is lower than the standard value specified in Table 2, or the number of batteries that are less than 90% of the standard value is greater than 0, the battery capacitance is judged to be unqualified

7. Products Mark

7.1 The mark of the battery contains the following contents

① Specification Type ② Norminal voltage ③ Positive and negative mark
④The date code ⑤Safety warning ⑥ Company name
⑦Signs that do not allow batteries to be thrown in the trash

7.2 Code content

The date code with year/month/day will be marked on the battery sleeve

8. Storage

Lithium batteries should be stored in a cool, clean and dry environment. The recommended temperature ≤30℃ and the relative humidity ≤60%. Avoid contact with corrosive substances, keep away from fire and heat sources, and do not place the battery in direct sunlight or rain.

9. Safety

Do not remove the battery from its original packaging before use.
Do not place batteries in scattered locations to avoid accidental short-circuiting.
Do not heat the battery more than 100℃ or burn it.
Do not charge the battery.
Do not weld directly on the surface of the battery. Use batteries that are pre-equipped with solder pins or leads.
Do not mix new and used batteries or different brands of batteries.
Do not disassemble or dissect the battery
No short circuit is allowed between positive and negative battery, and no reverse connection between positive and negative battery

10. Delivery

In the process of transportation, the battery should avoid sun exposure, fire baking, rain, water immersion, put together with corrosive substances. The impact and vibration in transportation and loading and unloading should be limited to a minimum. For paper transportation, if it is shipping, it should be placed away from the engine, and it can not be left in an unventilated environment for a long time in summer.

11. The revision

Amendments shall be made through prior negotiation by both parties. Any problems caused by disputes, which are neither defined nor described in this specification, shall be resolved through mutual negotiation by both parties.

12. Important note

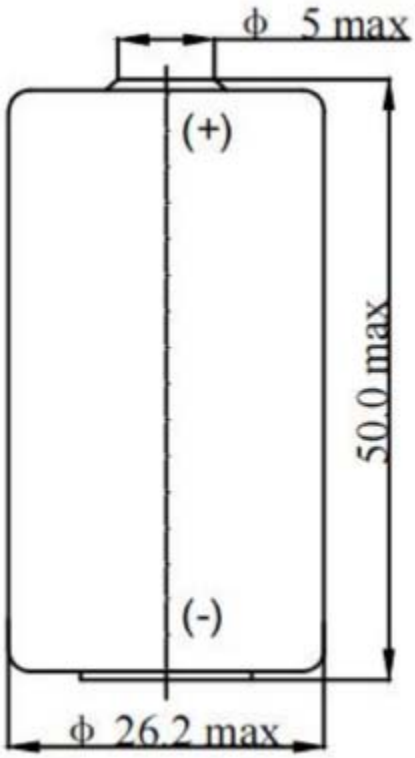
(1) Battery within 12 months from the date of delivery, battery ensure that they meet the content covered in this specification. If any other requirement, customer must make requests during this time period. In the guarantee period, if the battery has been proved to be defective Akyga will provide qualified battery without defect, 3 months is not installed batteries, suggest to activate cells, activate program consult Akyga battery.
(2) In practical applications, it is the customer's responsibility to confirm and ensure the compatibility and reliability of the battery to the device.

(3) Akyga shall not be liable under any of the fdlowing circumstances: Customer's failure to properly handle, operate, install, test, maintain, or test batteries. Or failure to follow the instructions, notes, notes, and other instructions and recommendations of Akyga in this Specification.

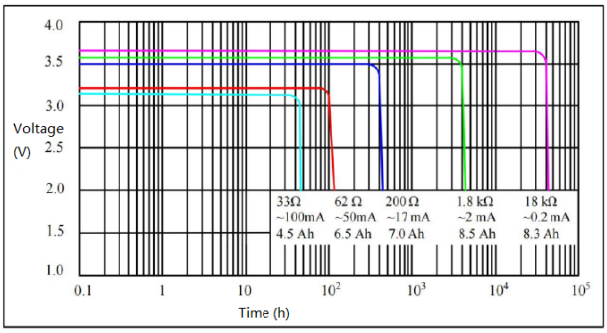
13. Product Responsibility Statement

Before using the battery, it must be operated in strict accordance with this product specification. Use above ambient temperatures may result in reduced service life and low voltage readings during the initial pulse phase. Full evaluation is made before use. Misuse of the battery will cause battery heating, explosion and human injury or property loss. Akyga battery will not take any responsibility for any accident caused by not following the product specifications.

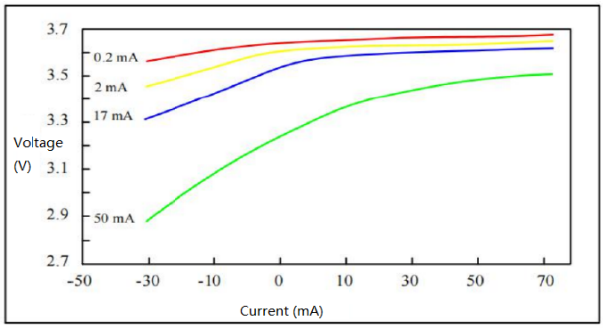
14. Product size drawing(Dimension unit is mm)



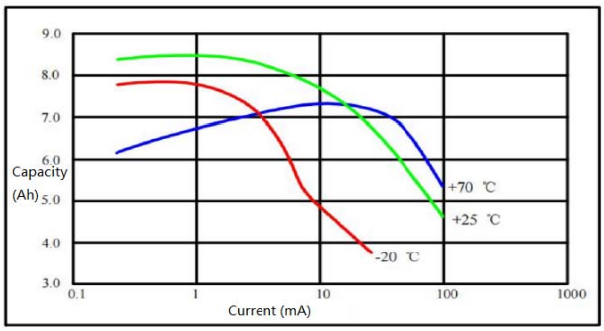
15. Electrical performance graph



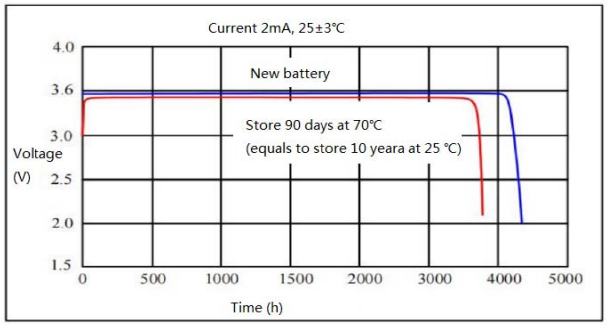
25 ℃ discharge curve



Voltage and current relation curve



Capacity and current curve



Storage characteristic curve