

Cylindrical Li-SOCl₂——ER17505M



1. Objective

To regulate the performance index and test method of ER17505M, as well as guidelines and warnings.

2. Battery type

Cylindrical Lithium thionyl chloride, Power type

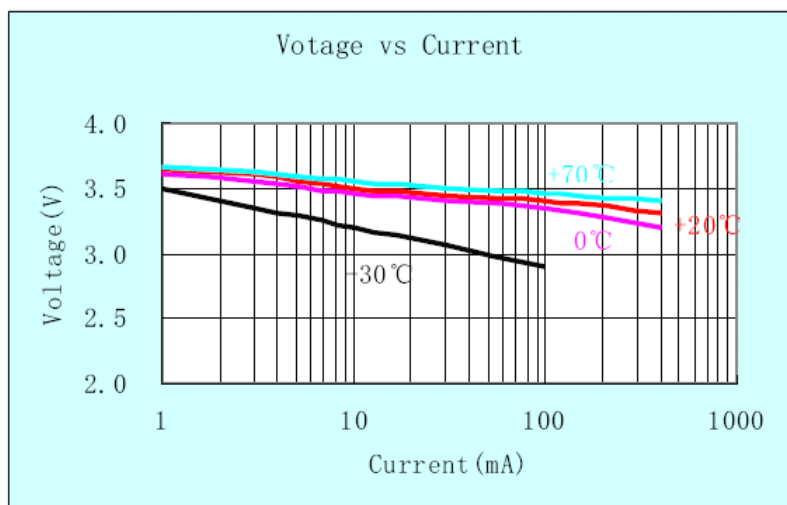
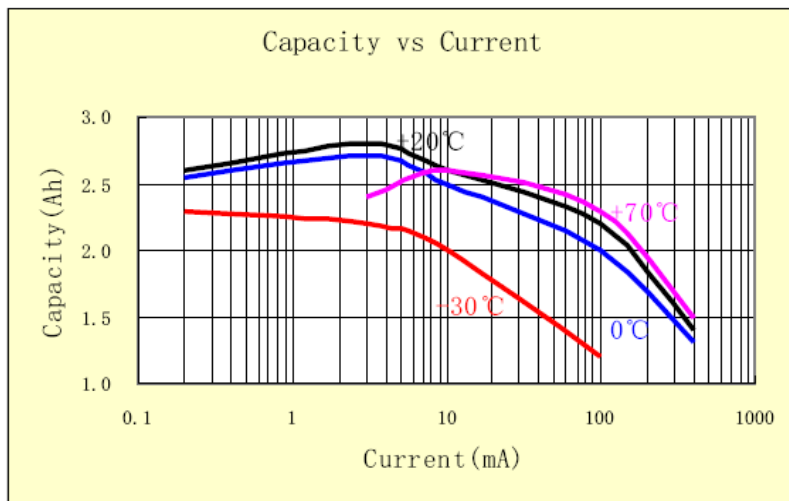
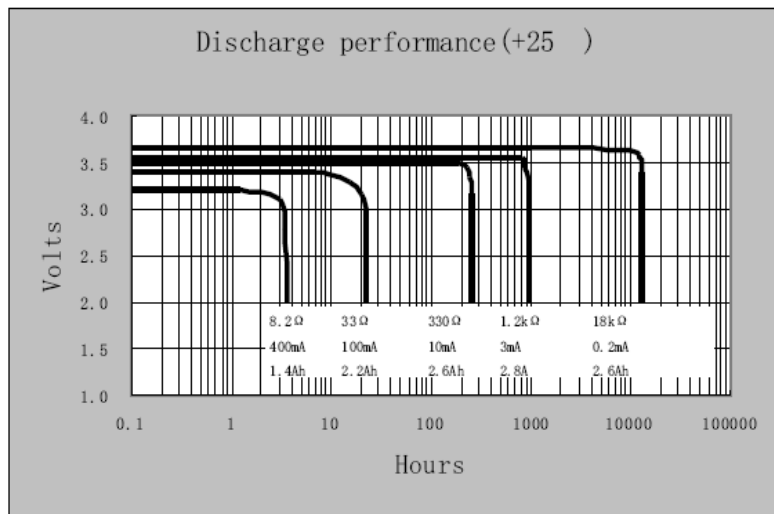
3. Technical parameter and applications

3.1 Technical parameter

Number	Item	Trait	Remarks
3.1.1	Model	ER17505M	
3.1.2	Standard	A	
3.1.3	Exchange Model	LST17500	
3.1.4	Rated voltage	3.6V	At 1mA +20°C
3.1.5	Rated capacity	2800mAh	1mA +20°C, 2.0V
3.1.6	Open-circuit voltage	3.66V	At +20°C
3.1.7	Max constant discharge current	600mA	At +20°C
3.1.8	Max pulse discharge current	1000mA	At +20°C
3.1.9	Pulse capability	1000mA	Typical value : every 2 minutes 1000mA/0.1s
3.1.10	Storage temperature range	+30°C(+86°F)	Max
3.1.11	Operating temperature range	-55°C~+85°C	-76°F~+185°F
3.1.12	Air tight test	No electrolyte leakage	Normal use
3.1.13	Size	17.5*50.5mm	
3.1.14	Weight	27.0g	
3.1.15	Self discharge	≤1% per year	
3.1.16	Terminal	radial tabs, radial pins, axial leads, flying leads	

3.2. Discharging curve

3.2.1 Discharge at constant current ($23 \pm 2^\circ\text{C}$)



3.3. Battery trait

- (1) High energy density. The battery can reach 420WH/kg and 800WH/dm³.
- (2) High Capacity.
- (3) Low self discharge: self-discharge rate per year is less than 1%.
- (4) High voltage. The open circuit voltage of a single battery is 3.66V, operating voltage changes with load, commonly between 3.3—3.6V, the end-voltage is 2.0V or 2.5V.
- (5) Stable operating voltage. The voltage is excellently stable during working, more than 90 percent of capacity can be output from high voltage platform, with voltage even no change.
- (6) Wide operating temperature range. It may work at temperatures ranging from -40-+85℃, the widest range in all of the batteries.
- (7) Long storage life. Its self-discharge rate per year is less than 1%, and complete sealing structure makes the battery stored for 10 years or more in common temperature.
- (8) Stainless Steel Case.
- (9) Sealing metallic glass.
- (10) Noninflammable electrolyte.
- (11) Sealed laser welding.

3.4. Application fields

- (1) Intelligent IC card and utility metering;
- (2) Industrial-used PC, computer RAM, CMOS memory backup power supply;
- (3) Medical instrument, earthquake detector, digital control machine tool;
- (4) Telephone, underwater weapon, military radio station, portable communication equipment, radio communication;
- (5) Taxi meter, tire-pressure monitoring system(TPMS), etc.

4. Storage

- (1) Clean, dry environment. (<30%RH)
- (2) Temperature $\leq +30^{\circ}\text{C}$

5. Warnings

- (1) Do not short-circuit batteries. Short-circuit may cause rupture, heat, leakage, possibly fire, explosion etc.
- (2) Do not dispose the battery in fire. Above 85℃ temperature may cause gasket distortion and leakage, fire or explosion.
- (3) Do not weld or solder directly to batteries for long time. Solder on the terminals of the battery directly for long time may cause heat generation and result in battery leakage or explosion.
- (4) Do not charge batteries. Charging may cause gas evolution or internal short circuiting, followed by fire or explosion etc.

- (5) Do not force discharge batteries. The batteries over-discharged by external power source or other batteries connected in a series may cause explosion, leakage, heat generation or expend.
- (6) Do not use battery in series or parallel by yourself. It may cause leakage, fire or explosion.
- (7) Do not reverse the positive and negative terminals when mounting the battery by heat generation or explosion.
- (8) Do not swallow by mistake. Keep the batteries away from children. If batteries are swallowed by mistake, immediately contact a doctor.
- (9) Do not throw away battery randomly. Please dispose the batteries in accordance with appropriate federal, state and local regulations.

6. Caution

- (1) Do not throw the battery into water.
- (2) Store the battery in dry and ventilated environment.
- (3) Stop using the battery when leakage, heat generation.

