

Lithium Thionyl Chloride Battery with Hybrid Pulse Capacitor

http://www.akkutronics.com

3.6V Li-SOCI₂ Battery with Pulse Capacitor ER14505-4P+HPC1530-LC

FOR HIGH PULSE CURRENT

ER14505 Electrical characteristics

Nominal capacity

At 23±2°Cdischarge at constant current 2.0mA until 2.0V cut off,

Battery capacity depending on temperature and discharge currents and cutoff voltage changes.

2400mAh

Nominal voltage

Micro-current discharge platform voltage reference values

has to do with battery chemistry system and has nothing to

3.6V

≤30℃

≤75%RH

do with the battery model.

Open circuit voltage

The voltage between positive and negative while the current ≥3.65V

is open.

Maximum continuous current

nuous discharge value which rated capacity 50% can permit. 100mA

Maximum pulse discharge current

At 23±2°C, battery discharge duration for 3 seconds and stand

At 23±2℃ the battery can discharge at least the max conti-

27 seconds, it can discharge at least the max pulse discharge 200mA

value which rated capacity 50% can permit.

Storage condition

Stored the battery under recommends condition to make sure effectively battery's performance, the storage temperature or

humidity too high will increase battery's self-discharge rate

and reduce battery's storage life.

Operating temperature

Exceed the operating temperature range could lead to battery

operating voltage reduction or even a security risk. -55~+85 ℃

Outline dimension

Finished Single cells' standard size 14.5×50.5mm

Weight

Finished Single cells' max weight 22.0g

Self-discharge rate

Out of the recommended condition, the self-discharge rate 1%

may increase.

Key features



- High Energy Density
- High single cell voltage
- Light weight
- High security
- Stable operating voltage
- Wide Operating temperature range
- Low Self-discharge rate
- UN38.3 and ROHS Compliance

Main applications



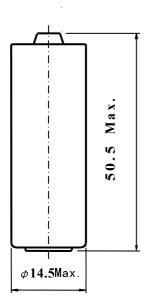
- Intelligent instruments
- Safe alarm system
- Signal lights and the post indicator transfer
- back-up record power
- Medical equipment
- Wireless and other military equipment
- Active RFID
- Tyre pressure testing system
- GPS system
- GSM system



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ER14505 Dimension

Unit: mm

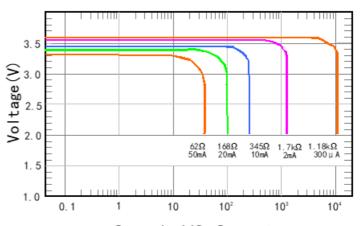


Warning

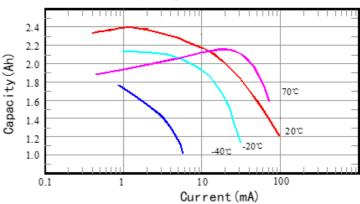
- Do not connect the positive and negative terminals of the battery.
- Do not place battery into fire
- Do not weld directly battery long time.
- Do not recharge battery.
- Do not force-discharge.
- Do not combine batteries in series or parallel by oneself.
- Do not reverse the positive and negative terminals
- Do not swallow.
- Do not discard.
- Stop immediately use it when serious heating or leakage.
- Before using our products, please read the manual Carefully or contact our Technician.

ER14505 Discharge Curve

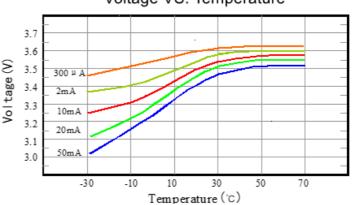
Discharge characteristics at 23±2°C



Capacity VS. Current



Voltage VS. Temperature





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HPC1530 Electrical characteristics

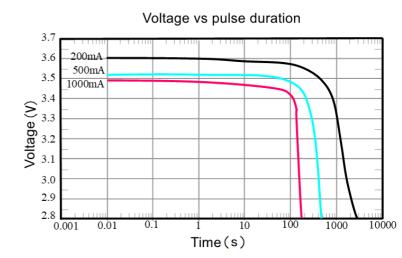
(23±2°C)

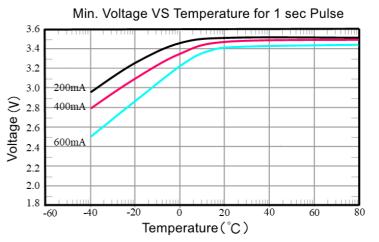
Nominal voltage	3.67V
Nominal capacity	75mAh
Nominal discharge current	125mA
Max. cont. discharge current	750mA
Pulse current capability	3000mA
Discharge end voltage	2.5V
Max. charge voltage	4.1V
Nominal charge current	50mA
Cell impedance @ 1kHz	≤120mΩ
Operating temperature range	-40~+85°C
Outline dimension	Max. 15.1x30.0mm
Weight	10.0g

ER14505-4P+HPC1530-LC Electrical characteristics (23±2°C)

Capacity to 2.5V (@350mA for 10s, interval time 30min)	9600mAh
Nominal voltage	3.6V
Maximum 1 second pulse to 2.5V	2000mA
Maximum pulse length @350mA to 2.5V	750sec
Operating temperature range	-40~+85°C
Weight	100g

ER14505-4P+HPC1530-LC **Discharge Curve**





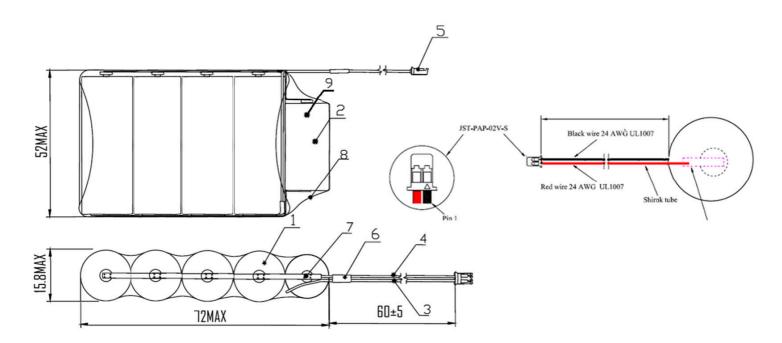


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Battery Pack Dimension

ER14505-4P+HPC1530-LC Drawing (3.6V 9600mAh)

unit: mm



No.	Item	Spec / Part No.	Qty
1	Battery	ER14505 3.6V 2400mAh	4
2	Heat Shrink tube		1
3	Wire Black -	UL1007 AWG24	1
4	Wire Red +	UL1007 AWG24	1
5	Connector	JST PAP 02V S	1
6	Black heat shrink tube		1
7	Nickel strip		1
8	Heat Shrink tube		1
9	Super capacitor	HPC1530	1

Please consult with Akku Tronics for further information.