Hybrid Pulse Capacitor

HPC1530

3.6V or 3.9V, Capacitor



Specifications

Standard HPC-1530 Nominal Voltage 3.6V or 3.9V

Nominal Discharge Capacity

Charged to 3.67V 300As (83mAh,300mWh)
Charged to 3.90V 510As (142mAh,553mWh)
Charged to 4.10V 640As (178mAh,729mWh)

Discharge End Voltage2.5VNominal Discharge Current125mAMax. Cont. Dis. Current750mAMax. Pulse Current3000mA

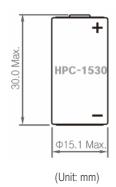
Charge (constant current)

Maximum Charge Current 50mA Maximum Charge Voltage 4.10V

Operating Temp. Range-40~+85°CCell Impedance (at RT,1kH)Max. 120ΩWeight10.0gUL Filing No.Yes

Dimension





General Behavior

1. Shelf life at different storage temperatures to 80% initial capacity

Temperature	HPC Alone	HPC in Hybrid Battery
RT	3 years	10 years
+60°C	4 weeks	7 years
+80°C	1 week	At least 1 year

2. No. of charge and discharge cycles to 80% of initial capacity

	100% DOD	10% DOD	1% DOD
Charge to 3.67V	4,000	40,000	400,000
Charge to 3.90V	1,000	10,000	100,000

3. Temperature Range

	HPC Alone	HPC in Hybrid Battery
Operating Temperature	-30~+60°C	-40~+85°C
Storage Temperature	-30~+60°C	-30~+60°C

4. Safety

Short Circuit @RT, +55°C, +85°C	Pass
High Temperature exposure	Pass
Overcharge	Pass
Compression	Pass
Shock and Vibration	Pass
Impact	Pass
Forced discharge	Pass

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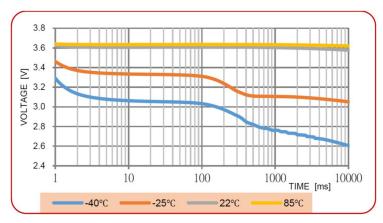
HPC1530

3.6V or 3.9V, Capacitor

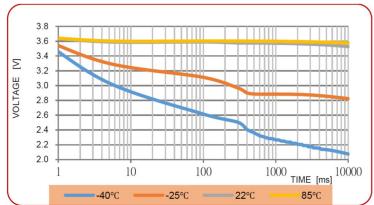


Performance Data

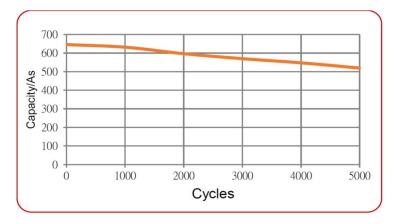
Voltage & Time curves for HPC-1530 at Li/SOCI2 potential 3.67V, 350mA



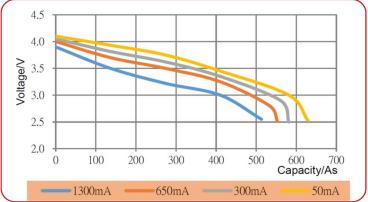
Voltage & Time curves for HPC-1530 at Li/SOCI2 potential 3.67V, 600mA



Cycle Life for HPC-1530 @100% DoD (charge @50mA, discharge @125mA)



Voltage curves for HPC-1530 at various discharge rates at +22°C @4.1V



WARNING

- Fire, explosion and severe burn hazard.
- Do not disassemble
- Do not heat above 100°C
- Do not short circuit
- Do not incinerate
- Do not expose contents to water
- Do not charge above 4.1V