www.longsingtechnology.com
Room 2305, 23/F, OTB Building, 160 Gloucester Road, Wanchai, Hong Kong

HPC-1520

LONG SING

Hybrid Pulse Capacitor (HPC) for IOT batteries

Performance Data

(Typical values for batteries stored at +25°C for one year)

System	Hybrid Pulse Capacitor cell
Version	HPC1520
Capacity when charge to 3.67V	>145AS
Max. Pulse Current	1A
Discharge End Voltage	2.5V - End voltage can reach 2.0V at -20°C
Max.Charge Voltage	3.67V
In Parallel	ER(3.6V)
Charging Method	self balancing charging
Temperature Range	-40°C~+85°C
Cell Impedance @ 1kHz,RT	max. 180mΩ
Weight	8.2g
Dimension	Φ14.5*H20.0mm

Self Discharge Current

Temperature	@3.67V
20°C	1.5uA
40°C	3uA

Key Features

- Full seal technology
- Extremely low self discharge rate
- Wide operating temperature range
- Low capacity, high pulse current safe design

Main Applications

- Long service life, high pulse current applications
- Long service life GPS+GSM applications
- Utility Meters(AMR)
- Asset, Container & Cargo Tracking
- Communication Equipment
- Sonar Buoys
- Security & Medical Device

Safety:

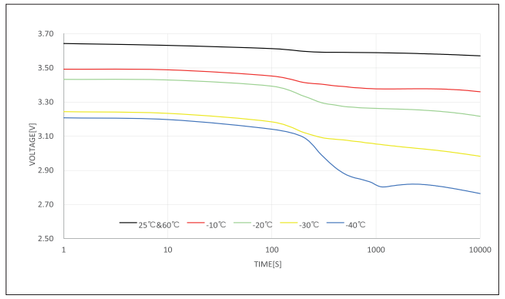
UL1642 , IEC62133 , UN38.3

LONG SING TECHNOLOGY GROUP (HONG KONG) LIMITED
Direct: +86-0755-86309333 **Fax:** +86-0755-83473087

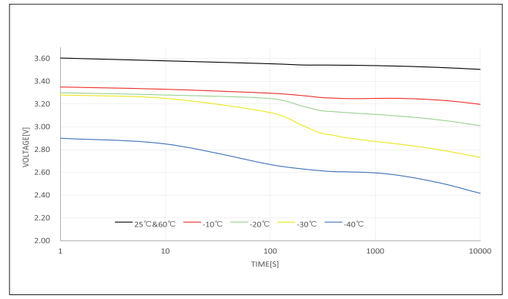
www.longsingtechnology.com
Room 2305, 23/F, OTB Building, 160 Gloucester Road, Wanchai, Hong Kong

Performance Data

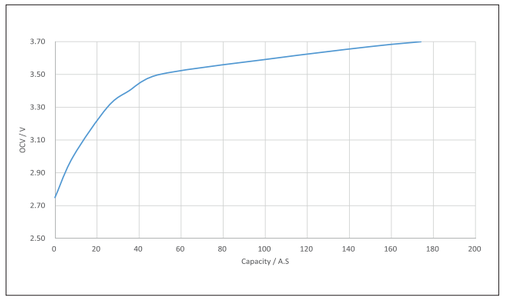
Voltage curves for HPC1520 at Li/SOCl2 potential **(3.67 V), 200 mA**



Voltage curves for HPC1520 at Li/SOCl2 potential **(3.67 V), 350 mA**



Available c apacity vs. OC V f or HPC1520 **(at RT, 20mA charge, 50 mA discharge)**



HPC used in a IOT battery pack (ER+HPC) usage considerations

- HPC is the key for high current pulse and low temperature load capability in ER+HPC battery pack.
- The capacity of HPC can be ignored for the length of life time in the ER+HPC battery pack.
- The self-discharge of HPC can be ignored for the battery life of ER+HPC, which is mainly affected by the capacity attenuation of ER.
- The whole ER+HPC IOT batteries can not be charged.

LONG SING TECHNOLOGY GROUP (HONG KONG) LIMITED
Direct: +86-0755-86309333 **Fax:** +86-0755-83473087

Any values given here are for informational purposes only. They also depend on actual conditions of use and are not warranties of future performance. Subject to change.