



Li-polymer Battery Specification

Model NO.

PL503040-1S1P

Revision:

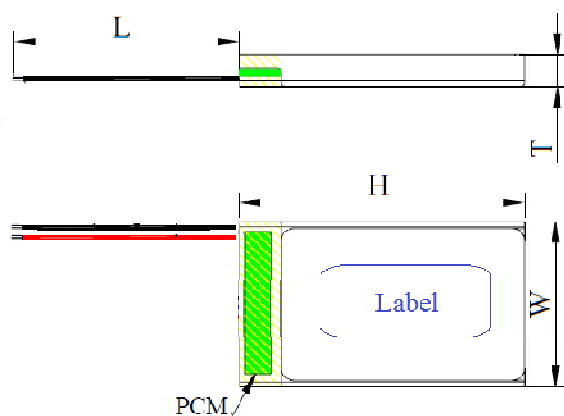
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Document NO.

Product Specification

NO	Item	General Parameter	Remark
1	Rated Capacity	600mAh	Standard discharge 0.2C after Standard charge 0.2C
2	Minimal Capacity	580mAh	
3	Nominal Voltage	3.7V	
4	Discharge Cut-off Voltage	3.0V	
5	Charging Voltage	4.2V	
6	AC Impedance	$\leq 250\text{m}\Omega$	Internal resistance measured at AC 1KHZ after 50% charge
7	Standard Charge	300mA	Charge time : Approx 2.5h
8	Standard Discharge	300mA	
9	Max Continues Charge Current	600mA	
10	Max Continues Discharge Current	600mA	
11	Operation Temperature Range	Charge: $0\sim 45^{\circ}\text{C}$ Discharge: $-20\sim 60^{\circ}\text{C}$	65+/-20%R.H. Bare Cell
12	Weight	Approx	
13	Cycles Life	500 Cycles	Higher than 60% of the Initial Capacities of the Cells

External Dimension Drawing



External Dimension

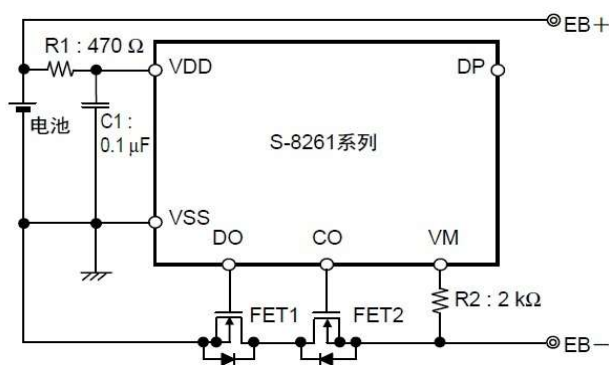
Thickness	5.2mm max
Width	30.5mm max
Height	42.5mm max
Wire Length	$30\pm 3.0\text{ mm}$

BOM List

1. Cell (1S1P)	PL503040-600mAh
2. PCM	P0xxx
3. Wire	UL1007 26AWG
4. Connector	/

Parameter of PCB

Protection Circuit Schematic



List of Parameter

Parameter	Min	Typ	Max
Overcharge Detection Voltage(V)	4.255	4.28	4.305
Overcharge Detection Delay Time(S)	0.96	1.2	1.44
Release Voltage of Overcharge(V)	4.03	4.08	4.13
Overdischarge Detection Voltage(V)	2.95	3	3.05
Overdischarge Detection Delay Time(ms)	115	144	173
Overdischarge Detection Release(V)	2.95	3	3.05
Over Current Defection(A)	1.5		3
Current Consumption in Normal(μA)	1	3.5	7
Short circuit protection	OK		
Impedance ($\text{m}\Omega$)	≤ 50		
NTC (Ω)	/		

Prepared By

Jeason/2021-11-19

Customer

Confirmation