

A品电子台灯聚合物锂电池

产品名称	A品电子台灯聚合物锂电池
公司名称	深圳市华彩源科技实业有限公司
价格	6.00/个
规格参数	品牌:其他,HC 型号:085068/357090 额定容量:2000 (mah)
公司地址	深圳市宝安区石岩街道光辉路21号厂房三楼
联系电话	13714446272

产品详情

扫本店

电池型号较多,可在线索取型号表及规格书.

可按要求加保护板,以下为普通台湾ic加mos参数

产品应用范围

(1) 液态锂离子可充电电池 ;

(2) 聚合物锂离子可充电电池。

3产品外观及工艺指标

序号	项目	检验方法及手段	检验标准
1	产品外观	目视	保护板外观应达到以下要求 : 布线合理 , 元件排列整齐 , 各

			焊盘及焊接点无氧化，无色泽异常，元件及pcb板表面干净，无污渍，不影响其商业价值。
2	产品工艺	焊接工艺	目视，借助放大镜，焊点圆滑，焊接牢固可靠，无假焊、虚焊、毛刺等焊接缺陷。
		板材材质	fr4玻纤双面
		pcb制作工艺	喷锡/绿油
		成品板焊接工艺	无铅制程焊接

4产品电气性能指标

topt=25

项目	符号	详细内容	标准
过充保护	vdet1	过充电检测电压	4.3 ± 0.1v
	tvdet1	过充电检测延迟时间	200ms (max)
过放保护	vrel1	过充电解除电压	4.1 ± 0.05v
	vdet2	过放电检测电压	2.4v ± 0.1v
过流保护	tvdet2	过放电检测延迟时间	100ms
	vrel2	过放电解除电压	3.0v ± 0.1v
短路保护	vdet3	过电流检测电压	150 ± 30mv
	idp	过电流保护电流	2a~4a
内阻 消耗电流	tvdet3	检测延迟时间	20ms (max)
		保护解除条件	断开负载
	tshort	保护条件	外部电路短路
		检测延迟时间	50 μ s (max)
		保护解除条件	断开短路电路
	rds	主回路通态电阻	rds 60m
	idd	工作时电路内部消耗	min : 0.2 μ a max : 0.6 μ a

5主要元件清单

序号	元件编号	元件名称	元件规格	封装形式	数量	厂商/备注
1	u1	单节锂电保护ic	dw01	sot-23-6	1	德普威
2	u2	mosfet	8205a	tsoop-8	1	德普威
3	r1	电阻	smd100 ± 5%	0603	1	国巨
4	r2	电阻	smd 1k ± 5%	0603	1	国巨
5	c1	电容	smd 0.1 μ f ± 20%	0603	1	国巨
6	r3	电阻	10k ntc	0603	1	
7	pcb	印制电路板			1	fr4/喷锡

6应用原理图

7端口说明

(1) b+ : 连接电池正极

(2) b- : 连接电池负极

(3) p+ : 连接电池输出或充电器正极

(4) p- : 连接电池输出或充电器负极

no序号	item内容	parameter参数	remark
1	rating voltage 标称电压	3.7v	
2	capacity 标称容量	typical : 4300mah 典型 : 4300mah min : 4200mah 最小 : 4200mah	0.2c discharge after 完全充电后用0.2c放电 的容量
3	charge voltage 充电电压	4.2v ± 0.1v	
4	impedance 内阻	80m (max)	
5	charging mode 充电方式	c.c/c.v. 恒流/恒压方式	constant current /constant voltage 恒流/恒压 视电池电
6	charging method 充电方法	standard charging 0.2c 标准充电0.2c fast charging 2a 快速充电2a	charging current 充电电流 charging current 充电电流
7	charging time 充电时间	standard charging 标准充电 fast charging	8hours 3hours

		快速充电		
8	end of discharge voltage 放电截止电压	2.5v ± 0.05v		
9	overcharge voltage 过充电保护电压	4.30 ± 0.05v		
10	over discharge cut off voltage 过放电保护电压	2.4 ± 0.1v		
11	over current 过电流保护	3-8a		
12	short circuit 输出短路保护	recover after removing the short circuit load 保护后撤销短路负载 恢复		
13	operating consumption current 工作消耗电流	10ua (max)		
14	operating temperature 工作温度	charging 充电 discharging 放电	0~45 -10~60	
15	storage temperature 贮存温度	-5 -35 recommend推荐 (25 ± 5)		storage capacity sh full charge 贮存时应充电至容
16	id resistor id电阻	/		
17	ntc resistor ntc电阻	/		
18	esd test 静电测试	± 4kv		
19	cycle life 循环寿命	300 cycle 300次		
20	max charging current	2.0a		
21	max discharge current	3.0a		

电池容量从15mah--10000mah型号较多不全部列出/电芯可根据客户要求做串联增加电压和并联增加容

量的组装。具体规格欢迎咨询。

电池样品请确认电池具体使用环境温度,充放电电流.等重要参数.

如有疑问请旺旺咨询

以下为锂电池的注意事项

handling of cells (电池操作注意事项)

6.1consideration of strength of film package(包装薄膜注意事项)

1)soft aluminium foil (铝箔软包装)

easily damaged by sharp edge parts such as pins and needles,ni-tabs,comparing with metal-can-cased lib.

相对于金属壳的方形电池 , 铝箔软包装比较容易被锐利部件刺损 , 如针尖、镍带。

2).sealed edgemay be damaged by heat above

6.2prohibition short circuit (禁止电池短路)

never make short circuit cell. it generates very high current which causes heating of the cells

and may cause electrolyte leakage, gassing orexplosionthat are very dangerous.

the lip tabs may be easily short-circuited by putting them on conductive surface.

such outershort circuit may lead to heat generation and damage of the cell.

an appropriate circuitry with pcm shall be employed to protect accidental short circuit of the
battery pack.

避免电池短路。短路会产生很高的电流而使电池发热以及电解液泄漏 , 产生有毒气体或爆炸是非常危险的。极片连接在导电物体表面很容易短路 , 外部短路会导致发热及损害电池。选用一个适当的保护电路可以在意外短路时保护电池。

6.3.mechanical shock (机械撞击)

lip cells have less mechanical endurance than metal-can-cased lib.

falling, hitting, bending, etc. may cause degradation of lip characteristics.

聚合物电池比金属壳方形电池的机械耐久性更小。

跌落、碰撞、弯曲等等都可能会降低聚合物电池的性能。

6.4handling of tabs (极片操作注意事项)

the battery tabs are not so stubborn especially for aluminum tab.

don ' t bend tab.

do not bend tabs unnecessarily.

极片的机械强度并非异常坚固，特别是铝片。没有必要时禁止弯折极片。

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7.notice for designing battery pack (电池外壳设计注意事项)

7.1 pack toughness (外壳坚韧度)

battery pack should have sufficient strength and the lip cell inside should be protected from mechanical shocks.

电池外壳应该有足够的机械强度使聚合物电池免受机械撞击。

7.2 cell fixing (电池的固定)

the lip cell should be fixed to the battery pack by its large surface area.

no cell movement in the battery pack should be allowed.

电池最大面积的一面应该固定在外壳上，安装后电池不能有松动。

7.3 inside design (外壳内部设计)

no sharp edge components should be insides the pack containing the lip cell.

外壳内安装电池的部位不应有锋锐边。

7.4 tab connection (极片连接)

ultrasonic welding or spot weldingis recommended for lip tab connection method.

battery pack should be designed that shear force are not applied to the lip tabs.

if apply manual solder method to connect tab with pcm, below notice is very important to ensure battery performance:

nthe solder iron should be temperature controlled and esd safe;

n soldering temperature should not exceed 350 ° c;

n soldering time should not be longer than 3s;

n soldering times should not exceed 5 times, keep battery tab cold down before next time soldering;

n directly heat cell body is strictly prohibited, battery may be damaged by heat above approx. 90 ° c

建议使用超声波或点焊焊接方法；外壳设计应使极片不受外力。

如果使用人工焊接保护板，下面的注意事项对于确保电池性能非常重要：

- n 焊接铬铁的温度必须可控且可防静电；
- n 焊接时铬铁的温度不能超过350 ° c；
- n 焊锡时间不能超过3秒钟；
- n 焊锡次数不能超过5次，待极片冷却后才能进行下一次焊锡；
- n 严禁直接加热电芯，高于90 度会损害电芯。

7.5 for mishaps (针对意外事件)

battery pack should be designed not to generate heat even when leakage occurs due to mishaps.

1) isolate pcm (protection circuit module) from leaked electrolyte as perfectly as possible.

2) avoid narrow spacing between bare circuit patterns with different voltage.

(including around connector)

3) lip battery should not have liquid from electrolyte, but in case if leaked electrolyte touch bare circuit patterns, higher potential terminal material may dissolve and precipitate at the lower potential terminal, and

may cause short circuit. the design of the pcm must have this covered.

发生意外时外壳设计应考虑即使在电池出现漏液时也不会发热。

1、尽量把保护电路与渗漏的电解液隔离开。

2、在不同的电压情况下避免出现小间距的裸露电路——包括插头周围。

3、聚合物电池不应该有来自电解液的液体，但是一旦发生电解液渗漏触及裸露电路，高电势端接子材料可能会溶解然后沉淀到低电势端接子，可能会造成短路。保护板的设计必须含有覆盖保护层。

8.notice for assembling battery pack (电池装配注意事项)

shocks, high temperature, or contacts of sharp edge components should not be allowed in battery pack assembling process.

在电池装配过程中不允许撞击、高温或接触尖锐部分。

9.others (其它)

9.1.cell connection (电池连接)

1) direct soldering of wire leads or devices to the cell is strictly prohibited.

2) lead tabs with pre-soldered wiring shall be spot welded to the cells.

direct soldering may cause damage of components, such as separator and insulator, by heat generation.

1、严禁直接焊接引线或设备到电池上。

2、极片在焊接引线之前应该先点焊到电池上，直接与电池热焊接，产生的热量会使电池的隔离体及绝缘体受损。

9.2.prevention of short circuit within a battery pack (电池内部的短路预防)

enough insulation layers between wiring and the cells shall be used to maintain extra safety protection.

the battery pack shall be structured with no short circuit within the battery pack, which may cause generation of smoke or firing.

在电池和引线之间应该有足够的绝缘层用于安全保护。电池的包装构成应没有导致起烟起火的短路情况。

9.3.prohibition of disassembly (禁止拆卸)

1) never disassemble the cells

the disassembling may generate internal short circuit in the cell, which may cause gassing, firing, explosion, or other problems.

2) electrolyte is harmful

lip battery should not have liquid from electrolyte flowing, but in case the electrolyte come into contact with the skin, or eyes, physicians shall flush the electrolyte immediately with fresh water and medical advice is to be sought.

1、不要拆卸电池。

拆卸电池会发生电池内部短路，会引起起火、爆炸、有害气体或者其它问题。

9.4 prohibition of dumping of cells into fire (不要把电池倾倒于火中)

never incinerate nor dispose the cells in fire. these may cause explosion of the cells, which is very dangerous and is prohibited.

不要焚毁电池，否则会致电池爆炸，这个很危险，必须禁止。

9.5 prohibition of cells immersion into liquid such as water (禁止浸泡电池)

the cells shall never be soaked with liquids such as water, seawater,drinks such as soft drinks, juices, coffee or others.

请不要把电池浸泡在液体当中，像清水、海水，及非酒精饮料、果汁、咖啡或者其它的饮料

9.6 battery cells replacement (更换电池)

the battery replacement shall be done only by either cells supplier or device supplier and never be done by the user.

更换电池应由电池生产商或设备供应商完成，用户不要自行更换。

9.7 prohibition of use of damaged cells (禁止使用损坏的电池)

the cells might be damaged during shipping by shock. if any abnormal features of the cells are found such as damages in a plastic envelop of the cell, deformation of the cell package, smelling of an electrolyte, an electrolyte leakage and others, the cells shall never be used any more.

the cells with a smell of the electrolyte or a leakage shall be placed away from fire to avoid firing or explosion.

电池可能在出货途中碰撞而受损。如果发现电池有异常，例如包装损坏、电池包裹变形，有电解液的味道、发现漏液等等，不要再使用这些电池。

电池如果有电解液的味道或者出现漏液，电池放置应该远离火源避免起火及爆炸。

10.period of warranty (保质期)

the period of warranty is half a year from the date of shipment.power tech international guarantees to give a replacement in case of cells with defects proven due to manufacturing process instead of the customer abuse and misuse.

电池的保质期从出货之日起为半年。如果证明电池的缺陷是在制造过程中形成的而不是由于用户滥用及错误使用造成，本公司负责退换电池。

11.storing the batteries (电池的存放)

the batteries should be stored at room temperature, charged to about 30% to 50% of capacity.we recommend that batteries be charged about once per half a year to prevent over discharge.

电池应当在室温下存放，应充到30%至50%的电量。如长时间储存，建议每半年充一次电以防止电池过放电。

12.other the chemical reaction (其它的化学反应)

because batteries utilize a chemical reaction, battery performance will deteriorate over time even if stored for a long period of time without being used. in addition, if the various usage conditions such as charge, discharge, ambient temperature, etc. are not maintained within the specified ranges the life expectancy of the battery may be shortened or the device in which the battery is used may be damaged by electrolyte leakage. if the batteries cannot maintain a charge for long periods of time, even when they are charged correctly, this may indicate it is time to change the battery.

由于电池是利用化学反应的原理，所以随时间的增加电池的性能会降低，即使是存放很长一段时间而不使用。如果使用条件如充电、放电及周围环境温度等情形不在指定的使用范围内，会使缩短电池的使用寿命，或者会产生漏液导致设备损坏。如果电池长周期不能充电，即使充电方法正确，这样需要更换电池了

可按客户要求定制18650锂电池2200mah、2000mah、1800mah、18650锂电池组7.4v、18650锂电池组11.1v、聚合物锂电池、聚合物锂电芯聚合物锂电池组、2串锂电池组、3串锂电池组、6串锂电池组和多串聚合物电池组、铝壳锂离子电池；手机锂电池、另可根据客户的要求，组合成不同电压/容量的电池组

锂电池 | 18650锂电池 | 18650充电电池 | 锂离子电池 | 磷酸铁锂电池 | 高倍率锂离子电池 | 聚合物锂电池 | 锂电芯 | 锂电池组 | 圆柱锂电池 | 圆柱形锂电池 | 带保护板电池 | 加板锂电池 | led强光手电筒用锂电池 | 大功率led户外锂电池 | 通讯设备用锂电池 | 移动电源用锂电池 | 笔记本电脑用锂电池 | 数码产品用锂电池 | 相机用锂电池 | 游戏机用锂电池 | 电动玩具用锂电池 | 电动工具用锂电池 | 仪表仪器用锂电池 | 照明矿灯用锂电池 | 对讲机用锂电池 | 移动电话用锂电池 | 小型电器用锂电池 | 高倍率锂电池 | 航模锂电池、大容量锂电池 | 高容量锂电池 | 50mah锂电池 | 120mah锂电池 | 800mah锂电池 | 1200mah锂电池 | 1600mah锂电池 | 2000mah锂电池 | 2400mah锂电池 | 2800mah锂电池 | 3000锂电池 | 3600mah锂电池 | 4000mah锂电池 | 4500mah锂电池 | 5000mah锂电池 | 6000mah锂电池 | 8000mah锂电池 | 9000mah锂电池 | 7600mah锂电池 | 10000mah锂电池

本产品的品牌是其他,HC，型号是085068/357090，额定容量是2000 (mah)，加工定制是是，标准电压是3.7 (V)，充电电流是1 (A)，适用类型是LED台灯，产品认证是MSDS，适用产品型号是台灯，充电时间是2H，电池类型是锂电池