深圳市拓达通电子有限公司

原材料承认书

SPECIFICATION FOR APPROVAL

客户名称/customer name	
产品型号/ Model	TDT-8480-20S-200A NMC
产品规格/ Specification	L157*W70*T28mm MAX
主要器件 Main configuration	IC：MM3474G05VBE 2113PB5B/SOT23-6
PCB工艺/PCB	Double layer, Green oil, Solder coating, ROHS
Document NO.	
版本/ Rev	00

部门 Department	编写(R&D) Registered	审核 (R&D) Checked	复核 (Quality) Deliberation	批准(R&D) Approved
签名/Sign				
日期/DATE				

客户确认 Customer Approve			
部门 Department	R&D	Quality	Approved
签名/Sign			
日期/DATE			
文件有效期限 Approved date	有限期限为 1 年 Period of validity 1 year		

在文件到期前一个月如果双方都对此文件都没有异议，此文件将自动延续有效期1年

If both sides have no dissidence in one month before the maturity of the Approved. It will be considered valid automatically for a one year period.

公司名称 Company Name	深圳市拓达通电子有限公司 SHENZHEN TUODATONG ELECTRONICS CO., LTD	电话 TEL	15013560873
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1. 产品变更履历/Product Modified Record List

产品变更履历/ Product Modified Record List		
日期/ Date	变更点描述/ Problem and Solution	责任人/ Principal
2021-8-13	1. 新开发	

2. 产品规格/ Produce Specification

	技术规范 TECHNICAL SPECIFICATION FOR APPROVAL	Rev	0.1
		Date	
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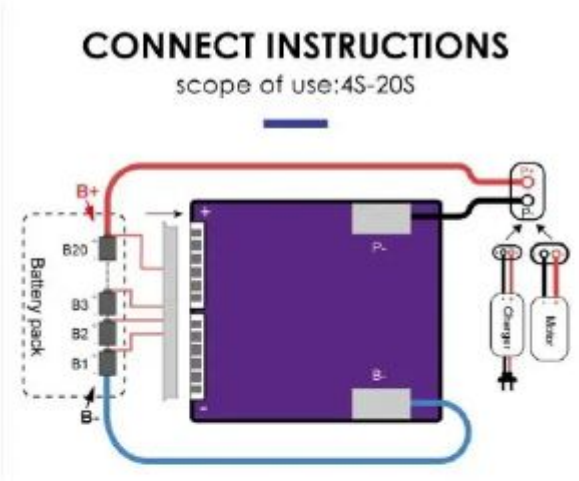
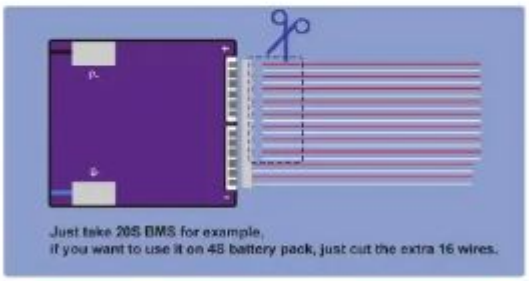
No	Item	Condition	Specification
1	输入电压/input Voltage	B+/B-间输入电压/input Voltage B+ to B-	-0.3~+85V(20S NCM)
2	过充电 Overcharge	保护电压/Detection voltage/1CELL	4.25±0.05V
3		恢复电压/ Release voltage/1CELL	4.19±0.05V
4		保护延迟时间/ Detection delay time	0.5~1.5S
5	过放电 Over discharge	保护电压/Detection voltage/1CELL	2.75±0.1V(1-4S) 2.5±0.1V(5-20S)
6		恢复电压/ Release voltage/1CELL	3.0±0.5V
7		保护延迟时间/ Detection delay time	500~1500ms
8	放电过流 Over discharge current	放电过流保护电流/Over current	@400A/3s
9		放电过流保护延时/delay time	
10	短路保护 Short detection	短路保护延时/ Short detection delay time	@1200A/100~600us
11		恢复条件/Release Conditions	断开负载/Cut off load
12	充电温度保护 Charge temperature protection	充电时的温度保护阀值/ Charge temperature protection	85±10℃ 65±10℃
13	放电温度保护 Discharge temperature protection	放电时的温度保护阀值/ Discharge temperature protection	85±10℃ 65±10℃
14	自耗电 Normal current consumption	工作状态自耗电 Normal current consumption of PCM	Max 120.00uA
15	OV 充电/0V charger	是否允许 0V 充电/allowed 0V change	YES
16	建议工作条件 Suggest working conditions	建议最大持续充/放电电流 max continuous charge/discharge current	100A/200A
17		建议工作温度/suggest working temperature	-20℃~+55℃
	平衡电压		
	平衡电流		
18	内阻/IR resistance	PCM 内阻/ IR of PCM	≤10.00 mΩ
19	NTC阻值	NTC 阻值(20~40)℃	无
20	PCM 尺寸	长度/The length of final PCM	157±0.15mm

21	The size of final PCM	宽度/The width of final PCM	70±0.1mm
22		厚度/ The thickness of final PCM	MAX:28mm
21	外观 Appearance	1) 没有元器件的破损/Nothing part deflection 2) 所有焊点良好/The status of solder is all right 3) PCM 没有翘曲/ PCM will not crook 4) 符合拓通达的出货外观标准 Settle for TDT Module appearance standard	
22	可靠性测试 Reliability test	1) ESD 测试：接触 4KV 空气 8KV / ESD test ： contact 4KV Air 8KV	





Tips:It is "cascade" design, can be use as 4S, 8S, 10S, 13S, 20S, etc... (4S-20S).Just cut off the other redundant lines.

Cables:

B1 connect battery cell's B1+ 3.7V
B2 connect battery cell's B2+ 7.4V
B3 connect battery cell's B3+ 11.4V
B4 connect battery cell's B4+ 14.8V
B5 connect battery cell's B5+ 18.5V
B6 connect battery cell's B6+ 22.2V
B7 connect battery cell's B7+ 25.9V
B8 connect battery cell's B8+ 29.6V
B9 connect battery cell's B9+ 33.3V
B10 connect battery cell's B10+ 37V
B11 connect battery cell's B11+ 40.7V
B12 connect battery cell's B12+ 44.4V
B13 connect battery cell's B13+ 48.1V
B14 connect battery cell's B14+ 51.8V
B15 connect battery cell's B15+ 55.5V
B16 connect battery cell's B16+ 59.2V
B17 connect battery cell's B17+ 62.9V
B18 connect battery cell's B18+ 66.6V
B19 connect battery cell's B19+ 70.3V
B20 connect battery cell's B20+ 74V

Power lines:

B- connect battery's B-, wire current> 50A 4 lines
P- connect charger-/ load-, wire current> 50A 4 lines
P+ connect battery's B20+, wire current> 50A 4 lines


BMS
P-
B-
P-
B-
Model: TDT-8480 Common port
Support: 4S-20S for LiFePO4 battery
Charging: 50A Discharging: 100A
www.sztuodalong.com
B1
B11 B10
B20