

# KEEPOWER TECHNOLOGY CO., LIMITED

Address: Fengmenao Industrial Park, Gangtou, Long Gang District, Shenzhen,China

Phone: +86 755 8995 6056

Fax: +86 755 8930 9659

Website: [www.keppower.com.cn](http://www.keppower.com.cn)

E-mail: [info@keppower.com.cn](mailto:info@keppower.com.cn)

## Approve of sample

<b>Customer name</b>				<b>Product number</b>	<b>3S-1550</b>
<b>Date of sample</b>				<b>Customer Type</b>	<b>3S-1550</b>
<b>Edition</b>	<b>01</b>	<b>Page</b>		<b>File number</b>	
<b>Checked by</b>			<b>Approved by</b>		<b>Made by</b>
					<b>HKY</b>
<b>Material number</b>					
<b>Customer confirm</b>					
<b>Advice confirm:</b>					
<b>Certification:</b>					
<b>Date:</b>					

# Contents

## 1、Outline

This specification is suitable **3-cell** Lithium ion Battery Protection circuit manufactured by KEEPOWER TECHNOLOGY CO., LIMITED.

## 2 Application

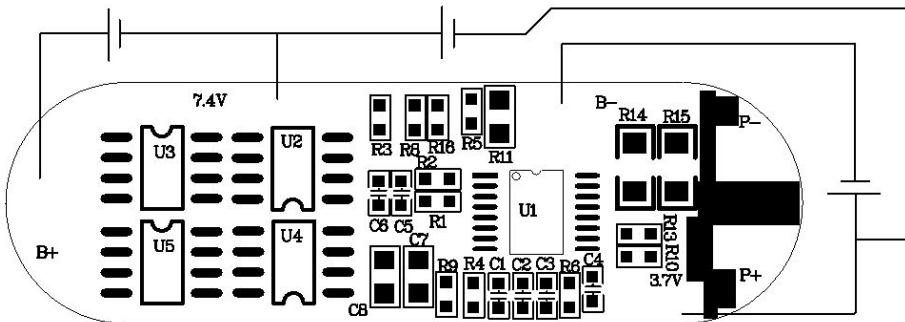
- (1) Lithium-ion rechargeable battery packs
- (2) Lithium-ion polymer battery packs

## 3 Electrical characteristics (IC: S8254AAG、MOS: AO4407\*4)

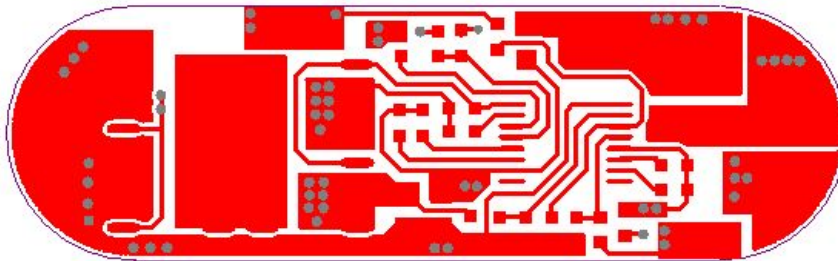
 $T_{opt}=25^{\circ}\text{C}$ 

Item	Symbol	Content	Criterion
Over charge Protection	$V_{DET1}$	Over charge detection voltage	4. 275±0.025V/CELL
	$tV_{DET1}$	Over charge detection delay time	1.0±0.5s
	$V_{REL1}$	Over charge release voltage	4. 075±0.05V/CELL
Over discharge protection	$V_{DET2}$	Over discharge detection voltage	2.3±0.08V/CELL
	$tV_{DET2}$	Over discharge detection delay time	100±50ms
	$V_{REL2}$	Over discharge release voltage	2.7±0.1V/CELL
Over current protection	$V_{DET3}$	Over current detection voltage	0.13±0.025V
	$I_{DP}$	Over current detection current	26.0±2A
	$tV_{DET3}$	Detection delay time	10±5ms
		Release condition	Cut load
Short protection		Detection condition	Exterior short circuit
		Short Detection delay time	300±250uS
		Release condition	Cut short circuit
Interior resistance	$R_{DS}$	Main loop electrify resistance	$V_C=4V$ ; $R_{DS}\leq 40m\Omega$
Current consumption	$I_{DD}$	Current consume in normal operation	60μA Type 100μA Max

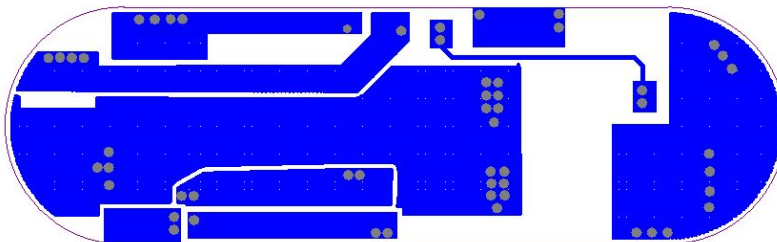
## 4、 THE CONNECT CAPTURE



## 5、 PCB layout



TOPLAYER



BOTTOMLAYER

# BOM 单

SPEC	NAME	QTY	REMARK	
I-S8254AAG-TSSOP-16	CONTROL IC	1	U1	SEIKO
M- AO4407- SO-8	MOSFET	4	U2,U3,U4,U5	AO
RP-5.1K-0603-5%	RESISTANCE	2	R1,R3	GUOJU
RP-1M-0603-5%	RESISTANCE	1	R2	
RP-1K-0603-5%	RESISTANCE	7	R4,R5,R6,R8,R10,R13,R16	
RP-51R-0805-5%	RESISTANCE	1	R11	
RP-0.01R -1206-5%	RESISTANCE	2	R14,R15	
留空	RESISTANCE		R9	
CP-224-0805-20%25V	CAPACITOR	2	C7,C8	
CP-104-0603-20%25V	CAPACITOR	6	C1,C2,C3,C4,C5,C6	
50*15*1.0(±0.1) 蓝油 1OZ	PCB板 (喷锡)	1	3S-1550	MEIYADI
备注:				

## 6、SIZE

