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1. Scope

This product specification shall be applied to rechargeable lithium-ion battery pack.

2. Descriptions and Model Number


(1) Descriptions	Rechargeable lithium-ion battery pack
(2) Battery Cell Configuration	1S1P
(3) Model Number	PJ21

3. Composition

Li-ion cells, a protection circuit module, insulators and nickel plates.

4. Product Specification :

Cell	UF553450Z
Battery pack capacity	1150mAh
Battery pack Nominal Voltage	3.7V
End voltage	2.75V
Optimum charge current	$\leq 1.15A(1C)$
Max charge voltage	$4.2V \pm 0.03V$
Max discharge current(at 25°C)	$\leq 1.5A$
Internal Resistance	$\leq 210m\Omega$
Charging method	CC/CV (Constant current/ voltage)
Operation temperature	Charge : 0~45°C
	Discharge : -20~60°C
Storage Temperature	-20~50°C (Less then 1 month)
	-20~40°C (Less then 3 month)
	-20~20°C (Less then 1 year)
Weight	$\leq 28g$
Battery pack to be ROHS compatible	
Battery pack shall be shipped in 25~30% charged state.	

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5. Battery pack protection function

(Ta=25°C)

5.1.

Battery pack overcharge detection voltage	4.280 ±0.025 V
Battery pack overcharge release voltage	4.080 ±0.050 V
Battery pack overcharge delay time	0.96 ~ 1.4 sec

5.2.

Battery pack overdischarge detection voltage	2.30 ±0.05 V
Battery pack overdischarge release voltage	2.30 ±0.10 V
Battery pack overdischarge delay time	150±30 msec

5.3.

Battery pack charge overcurrent detection current	1.29~5.41A
Battery pack charge overcurrent release	Reset by charge release
Battery pack charge overcurrent delay time	7.2~11 msec


5.4.

Battery pack discharge overcurrent detection current	2.13~6.04A
Battery pack discharge overcurrent release	Reset by load release
Battery pack discharge overcurrent delay time	7.2~11 msec

5.5


PCM current consumption	1~5.5 μA
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6. Battery Pack Parts List

No	品名	數量	Unit	MAKER	備註
1	Li-ION UF553450ZP 1150mAh	1	PCS	日本製	
2	PCM, 板號:JM-1SP050PP MOS: MTMC8E2A0LBF (Second Source:SP8601) 保護 IC:S8211CAK TH:10K±1% PPTC:MINISMD C200F-2	1	PCS	飛天	
3	龍華包貼 0.13*49*117.5mm 材質:龍華 60B	1	PCS	~	
4	840S 充型 for CP21 尺寸 : 0.12* 6 *7.9 mm	1	PCS	~	
5	絕緣膠帶, TESA4972, 0.05*4*49mm	1	PCS	~	
6	絕緣膠帶, PET, 0.13*4*25mm	1	PCS	~	
7	絕緣膠帶, 3M9495-300LSE, 0.15*31*48.6mm (不含 8mm 無背膠)	1	PCS	~	
8	鎳片, 充型, 0.127*7*10mm	1	PCS	~	
9	鎳片, 0.127*2.5*80mm	1	PCS	~	
10	膠, 導熱 9184RTV	0.1	g	~	
11	HOUSING:JST ACHR-03V-K CONTACTS:JST SACH-003G-P0.2 JST 1.2PITCH 3PIN 日立 1571 28AWG, PIN1 紅線:27mm (+) PIN2 綠線:31mm (TH) PIN3 黑線:35mm (-) (含裸線 2mm)	1	PCS	新呈	或同種規格
12	PJ21(G187) 標籤 尺寸:0.115*28.5*46mm 材質:白龍 50 上亮 供應商編碼:JM-1688-B *變更內文*	1	PCS	~	

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13	紙箱 (卡其色) (長)390* (寬)345* (高)142mm 5 層/AB 楞 外觀標示:0.68 裁積 (新增標示 儲存溫度 20~35 度 RH30%~85%)	0.004	PCS	~	
14	隔層 (厚)2* (寬)382* (長)336mm 3 層 / A 楞	0.01	PCS	~	
15	井格 (裁格)8+ (寬)56* (長)382mm / 3 層 / A 楞 *增加紙的磅數*	0.074	PCS	~	
16	井格 (裁格)11+ (寬)56* (長)336mm / 3 層 / A 楞 *紙的磅數增加*	0.027	PCS	~	
17	塑膠包裝袋 T0.05mm*W5.5cm*L13cm (總袋長) *1KG=1400PCS*	1	PCS	~	
18	標籤 普安側賣用空白整捲 100*65	1	PCS	~	

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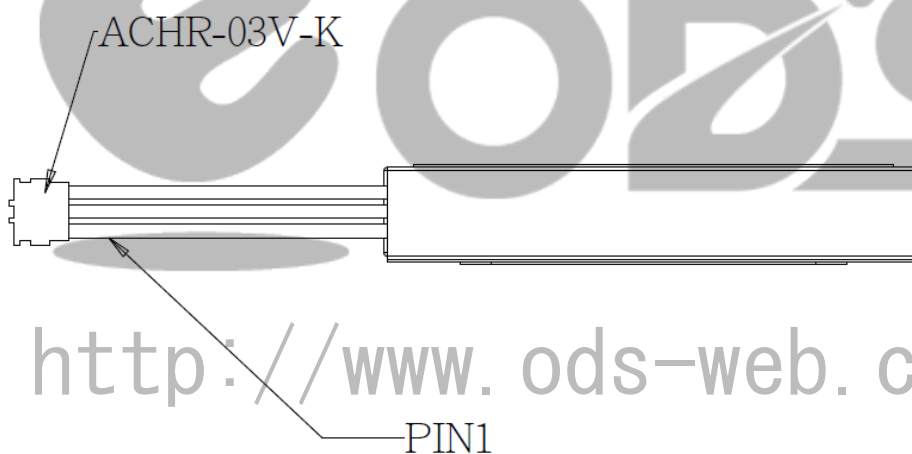
7. Terminal Definitions

7.1. Descriptions


Pack+ (P+) : Phone + / Charge +
 TH : Thermistor (10K±1%)
 Pack- (P-) : Phone - / Charge -

7.2. Diagrams

PIN1	P+	RED
PIN2	TH	GREEN
PIN3	P-	BLACK



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8. Handling Warning

- 8.1. Do not immerse the battery in water or seawater, and keep the battery in a cool dry surrounding if it stands by.
- 8.2. Do not use or leave the battery near a heat source as fire or heater
- 8.3. When recharging, use the battery charger specifically for that purpose
- 8.4. Do not reverse the position (+) and negative (-) terminals
- 8.5. Do not connect the battery to an electrical outlet
- 8.6. Do not discard the battery in fire or heat it
- 8.7. Do not short-circuit the battery by directly connecting the positive (+) and negative (-) terminal with metal objects such as wire.
- 8.8. Do not transport or store the battery together with metal objects such as necklaces, hairpins etc.
- 8.9. Do not strike or throw the battery
- 8.10. Do not directly solder the battery and pierce the battery with a nail or other sharp object
- 8.11. If the battery is stored over 3 months, it should be checked again about the remaining capacity and charge the battery.
- 8.12. We suggest that the voltage of battery should not be lower than 3V/cell when working and storing, or it may cause unrecoverable decay in its capacity.

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