

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	1S-1P
(3) Model Number	PJ21

3. Composition

Lithium-ion battery and Protection circuit module (PCM) and housing and wire.

4. Product Specification :

Cell model	SANYO UF553450Z
Battery pack capacity	1150mAh
Battery pack Nominal Voltage	3.7V
Optimum charge current	$\leq 1150\text{mA}$
Max charge current	2000mA(cutoff current=100mA)
Charge voltage	4.20 \pm 0.03V
Max discharge current	1500mA
Internal Resistance	<210m Ω
Charging method	CC/CV (Constant current/ voltage)
Operation temperature	Charge : 0~45 $^{\circ}\text{C}$
	Discharge : -20~60 $^{\circ}\text{C}$
Storage temperature	-20~50 $^{\circ}\text{C}$ (less than 1 month)
	-20~40 $^{\circ}\text{C}$ (less than 3 month)
	-20~20 $^{\circ}\text{C}$ (less than 1 year)
Weight	28g or less
Battery pack to be ROHS compatible	
Battery pack shall be shipped in a 30% charged state	

5. Battery pack protection function

5.1

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

5.2

Battery pack over discharge detection voltage	2.300±0.050 V
Battery pack over discharge release voltage	2.300±0.05 V
Battery pack over discharge delay time	120~180 msec

5.3

Battery pack over current detection current	2.4~4.1 A(V _{cell} =4.0V)
Battery pack over current release	load release or Pack recharged
Battery pack over current delay time	7.2~11 msec

5.4

Short detect delay time	240~360 μ sec
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5.5

PCM Current consumption	1.0~5.5 μ A
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6. Battery Pack parts List

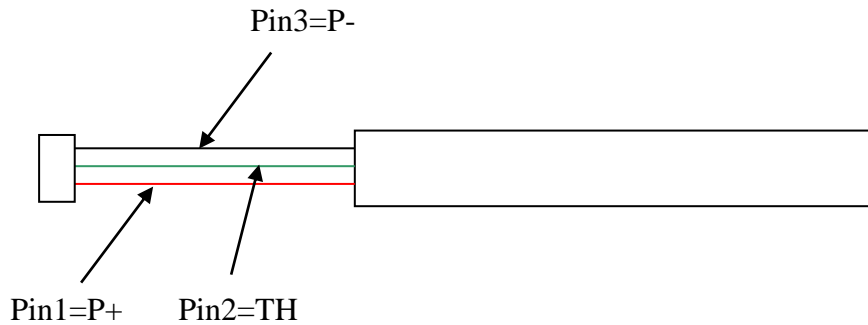
No.	Part	Model/Description	Q`ty	Memo
1	Li-ion battery	SANYO UF553450Z	1	1150mAh
2	PCM	JM-1SP050PP	1	
3	Protection IC	S8211CAK	1	or the equal level approval component.
4	Mosfet	MTMC8E2A0LBF	1	or the equal level approval component.
5	PTC	MINISMDC200F-2	1	or the equal level approval component.
6	Thermistor	TH11-3H103FT	1	
7	Nickel tap	0.127x2.5x8mm	1	
8	Nickel tap	0.127x2.5x12mm	1	
9	Nickel tap	0.127x2.5x57mm	1	
10	Nickel tap	0.127x3.0x23mm	1	
11	Insulation tape	YT130(0.05x5.0x20mm)	2	
12	Insulation tape	YT130(0.05x8.0x50mm)	1	
13	Insulation tape	PET(0.15x5.0x30mm)	1	
14	Case	FR83	1	
15	Housing	JST ACHR-03V-S 3PIN	1	
16	Wire	UL1571 28 or 30awg Red : 27±2mm Green : 31±2mm Black : 35±2mm	1	
17	Label	~	1	

7. Terminal Specifications

Pack + (P+) : Phone + / Charger +

Pack - (P-) : Phone - / Charger -

TH : Thermistor(10K±5%)



8. Handling warning

1. Do not immerse the battery in water or seawater, and keep the battery in a cool dry surrounding if it stands by.
2. Do not use or leave the battery near a heat source as fire or heater
3. When recharging, use the battery charger specifically for that purpose
4. Do not reverse the position (+) and negative (-) terminals
5. Do not connect the battery to an electrical outlet
6. Do not discard the battery in fire or heat it
7. Do not short-circuit the battery by directly connecting the positive (+) and negative (-) terminal with metal objects such as wire.
8. Do not transport or store the battery together with metal objects such as necklaces, hairpins etc.
9. Do not strike or throw the battery
10. Do not directly solder the battery and pierce the battery with a nail or other sharp object