



OUR MODEL	DR-202	Date	2017/8/2
OUR P/N	-	Rev.	0.3

1. Scope

This specification shall be applied to the lithium battery to be supplied by DPC. The battery pack is use for Tablet Products

2. Name and Model

Customer Model Name :

Model Name : DR-202

Cell Type : INR 18650-25R

Cell Configuration : 2S-3P

3. Product Specification

No	Item	Rate performance	Remark
1	Typical capacity	Above 7500 mAh	Discharge at 2.5A until end voltage of 2.7V
2	Normal voltage	10.8 V	
3	Charge voltage	12.6 V	
5	Continuous charge current	2 A	
6	Continuous discharge current	10 A	Max continuous Power ≤ 100W at 50°C
7	Maximum peak discharge current	16 A	
8	Operation temperature	-20~65 °C	
9	Storage temperature	0~40 °C	
10	Power consumption		
	normal mode	Average ≤ 800 μA	
	sleep mode	≤ 300 μA	
	shutdown mode	≤ 1 μA	

4. Protection Function of Protect IC(Ta = 25 °C)

Function item	Control function and operation	Remark
Over charge detection voltage	4.25 ± 0.01 V	
Over charge delay time	1~3 Sec	
Over charge release voltage	4.1 ± 0.1 V	
Over discharge detection voltage	2.8 ± 0.1 V	
Over discharge delay time	2~4 Sec	
Over discharge release voltage	3.2 ± 0.1 V	
Over charge prohibition current	5 ± 0.5 A	
Over charge prohibition delay time	2~4 Sec	
Over discharge prohibition current 1 st	16 ± 0.5 A	
Over discharge prohibition 1 st delay time	4~7 Sec	
Over discharge prohibition current 2 nd	18 ± 0.5 A	
Over discharge prohibition 2 nd delay time	2~4 Sec	
Hardware discharge prohibition current	25 ± 1 A	
Over discharge prohibition 2 nd delay time	4~7 mSec	
Short protection delay time	122 ± 300 uSec	

Over temperature of charge	45 ± 3 °C	
Delay of charge over temperature	2~4 Sec	
Release temperature of charge	40 ± 3 °C	
Over temperature of discharge	65 ± 3 °C	
Delay of discharge over temperature	2~4 Sec	
Release temperature of discharge	60 ± 3 °C	
Under temperature of charge	0 ± 3 °C	
Delay of charge under temperature	2~4 Sec	
Release temperature of charge	5 ± 3 °C	
Under temperature of discharge	-20 ± 3 °C	
Delay of discharge under temperature	2~4 Sec	
Release temperature of discharge	-15 ± 3 °C	

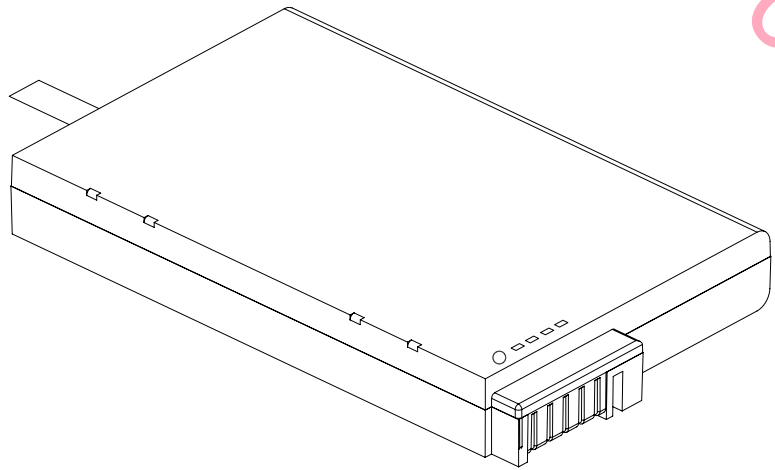
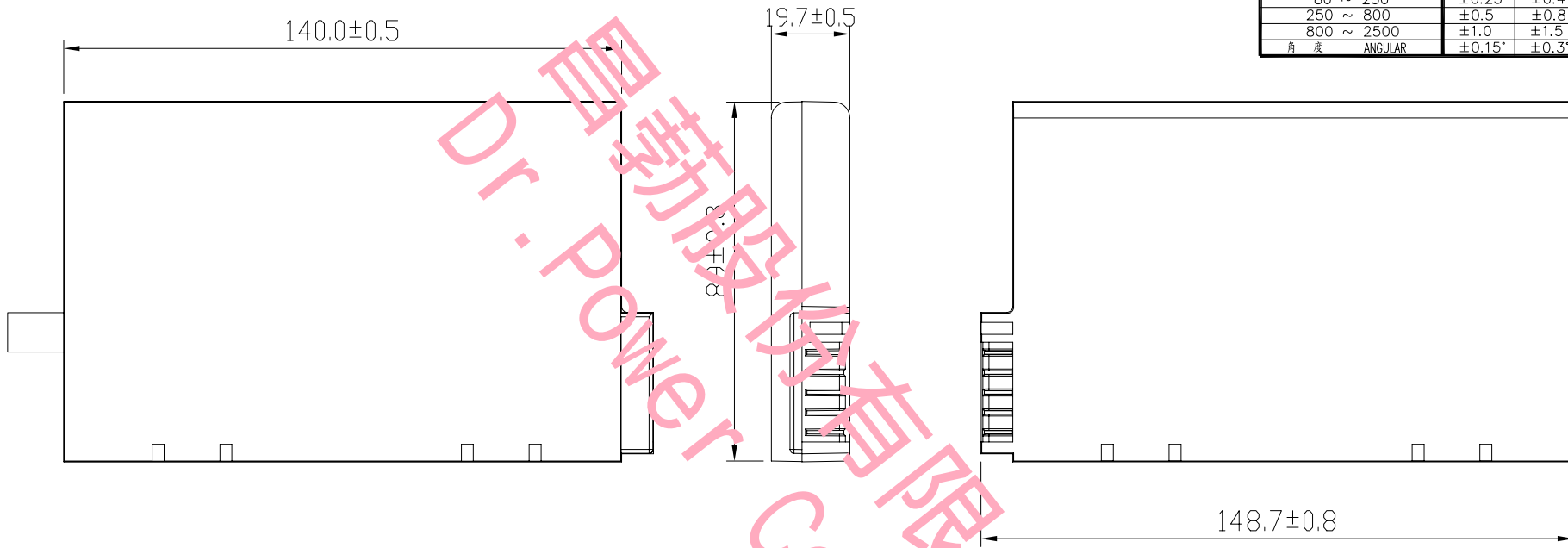
5. Protection Function of Permanent Fail(Non-recoverable)

Function Item	Control Function and Operation	Remark
Over charge detection voltage	Anyone cell ≥ 4.4 V	15 Sec
Over Temperature Protect	Mosfet Temp ≥ 100°C	5 Sec
	Cell Temp ≥ 75°C	10 Sec
FET Failure	C-FET cut off & current > 150 mA	10 Sec
	D-FET cut off & current > -150 mA	

6. Connect Pin Define

Name	Function	Remark
1	P+	
2	SMBus Clock	
3	SMBus Data	
4	ID	390Ω connect to P-
5	P-	

長度區分 RANGE	容許公差區分 (MM) COMMON TOLERANCE			
	A	B	C	D
低於 8 LESS THAN	±0.05	±0.1	±0.2	±0.4
8 ~ 25	±0.08	±0.15	±0.3	±0.6
25 ~ 80	±0.12	±0.25	±0.5	±1.0
80 ~ 250	±0.25	±0.4	±0.8	±1.5
250 ~ 800	±0.5	±0.8	±1.5	±3.0
800 ~ 2500	±1.0	±1.5	±3.0	±6.0
角度 ANGULAR	±0.15°	±0.3°	±0.5°	±0.8°

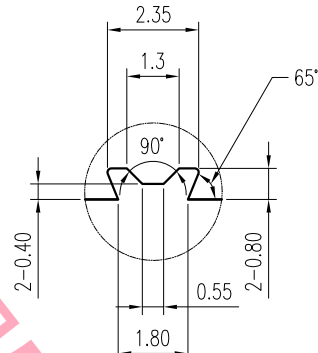
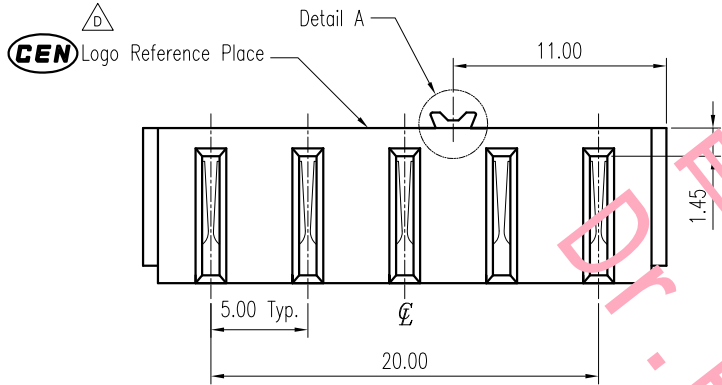


Dr. Power Corporation

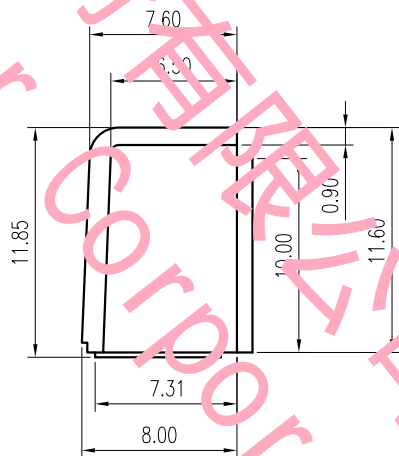
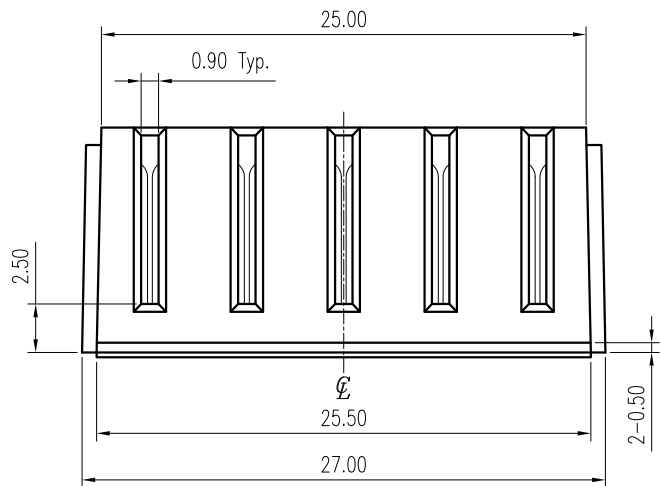
REV.	DATE	DESCRIPTION	CHANGE BY	APPROVAL BY	REMARKS	DCN/ECN NO.

核准 APPROVED		機型 MODEL	DR202
審核 CHECKED		材質 MATERIAL	
設計 DESIGN		名稱 NAME	LABEL組合圖
製圖 DRAWN	SUSAN.YU 2008/7/16	料號 P/N:	
單位 UNIT	MM	比例 SCALE	

THIRD ANGLE PROJECTION



Detail "A"
Scale 5:1



REV.	DESCRIPTION	ECN NO.	DATE	DRAWER
B	Modified by Customer Design	EC0606034	06/14/2006	Edsen
C	Add Plating Option $\triangle_C \times 1$	EC0908043	08/18/2009	Hyde
D	Add Logo Reference Place $\triangle_D \times 3$	EC1111001	11/08/2011	Judy

Notes:

- Material:
Housing: Thermoplastic UL 94V-0, Black
Terminal: Copper Alloy
- Finish:
 \triangle_D Terminal: Selected Gold or Tin on Contact Area, G/F or Tin on Solder Tails, Both over 50u" Min. Nickel Under-plated Overall
- Order Information :

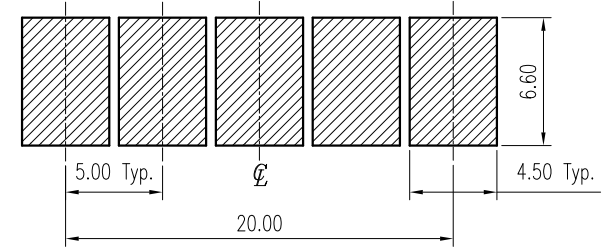
SDO-021 05 -10T X
T: RoHS (for High Temperature)

Amount of Pins

05: 5 Pins

Plating Option

- \triangle_D 0: 15u" Min. Ni Overall
- \triangle_C 1: G/F Overall
- \triangle_C 3: 5u" Min. Gold on Contact Area.
- \triangle_C Y: 80u" Min. Tin Overall



Recommended P.C.B. Layout
Layout Tolerance = ± 0.05 mm

DIMENSION IN mm [inch]

Tolerance unless otherwise specified

X.	$\pm 10'$
X.X ± 0.38	X.X' $\pm 5'$
X.XX ± 0.25	X.XX' $\pm 2'$
X.XXX ± 0.13	X.XXX' \pm

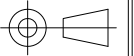
CUSTOMER DRAWING

Approver:

Checker:

Drawer: Judy

11/08/2011



Scale: 2.5 : 1

Size: A 4

Rev : D

Sheet: 1 / 1