



昌 勛 股 份 有 限 公 司  
DR.POWER CORPORATION  
零 件 規 格 書 / 承 認 書  
SPECIFICATION FOR APPROVAL

CUSTOMER : \_\_\_\_\_

DESCRIPTION : \_\_\_\_\_ Adapter \_\_\_\_\_

MODEL : \_\_\_\_\_ PSAC05R-050L6-R \_\_\_\_\_

CUSTOMER PART NO : \_\_\_\_\_

**APPROVED SIGNATURES**

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Rev	Date	Description	Designed	Checked	Approved
A	2020/1/7	Release		Kevin	

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2F, NO. 131, JILI ST., PEITOU, TAIPEI, TAIWAN, R.O.C.

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## II - Electronic Function

### 1. INPUT:

- 1.1 AC input range: 90 VAC to 264 VAC
- 1.2 AC input rating: 100VAC ~ 240VAC
- 1.3 AC input frequency: 47 - 63 Hz
- 1.4 AC input current: 0.3A (RMS) MAX at 115Vac/maximum load .  
0.15A (RMS) MAX at 230Vac/maximum load .
- 1.5 Inrush current: 30A @240Vac at 25C ambient cold start
- 1.6 Leakage Current: 5uA Max.240VAC,50Hz
- 1.7 No Load Power consumption: <0.075W at 230Vac
- 1.8 Capacitance Discharge: shall be less than 5V in one second while disconnecting from AC mains (264Vac)

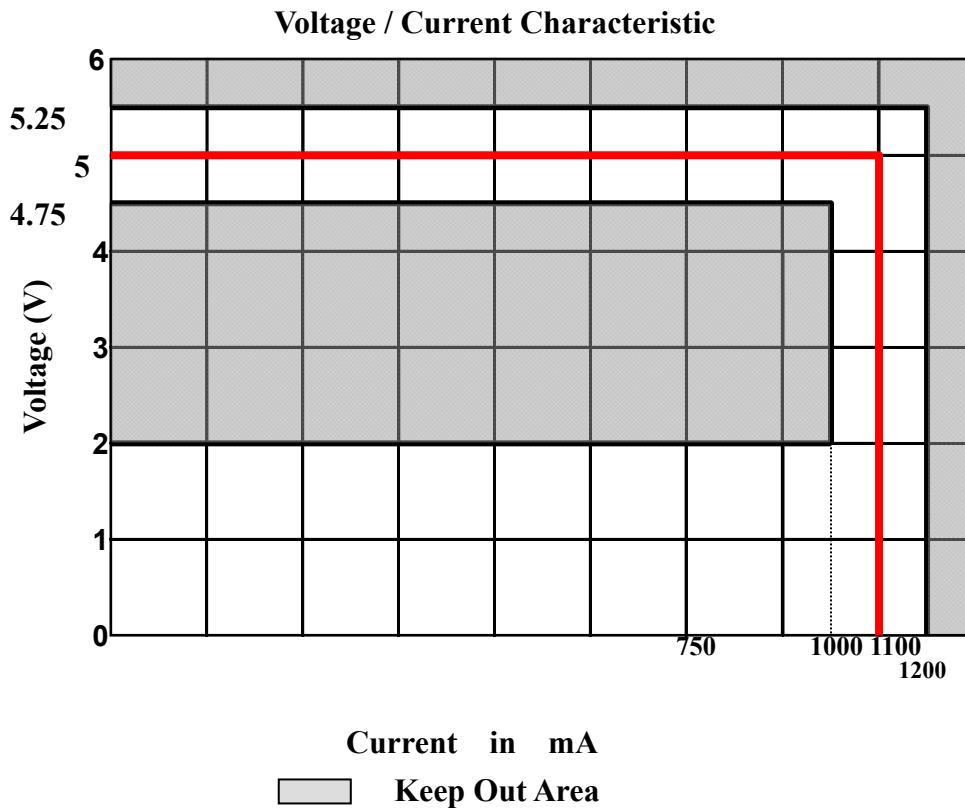
### 2 .Output characteristics:

- 2.1 O/P voltage: 5 V
- 2.2 Voltage tolerance:  $\pm 5\%$
- 2.3 Max output current: 1A
- 2.4 Current tolerance : 1.1A $\pm$ 100mA@4.75V~2V
- 2.5 Ripple: 200mV (pk-pk)

#### NOTE:

Full load Turn on & wait for 30 minute ,Measured by using a 12 inch twisted pair terminated with a 10uF EC capacitor and a 0.1uF ceramic in parallel.

### 3. Output Voltage/Current Characteristics



### 4. Overall performance

**4.1 Total output power: 5Watt Continuously**

**4.2 Efficiency**

**DOE level VI and CoC V5 Tier2**

**73.78% Min.**

**Testing at 100%, 75%,50%,25% of rated current output and then computing the arithmetic average of these four values.**

**Measure efficiency at 100% load after warm up 30min.**

**And measure efficiency test at 75%, 50%, 25% load after warm up 30min at 100% load.**

**64.59% Min. @ 10% of rated current output.**

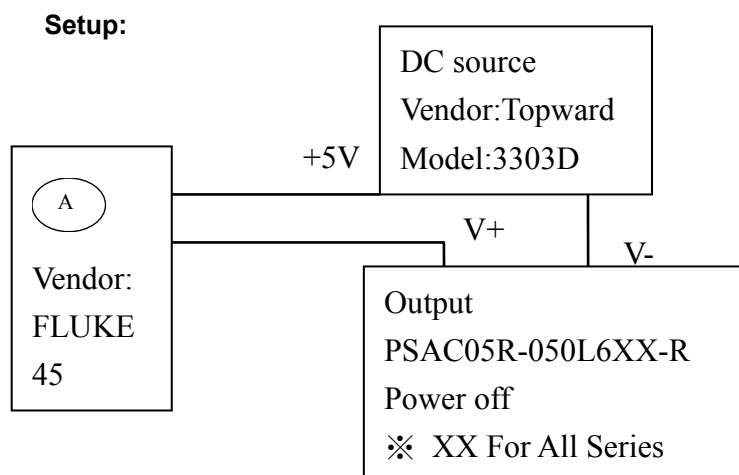
**Test Condition:A.T.E test equipment with YOKOGAWA WT210**

**4.3 Short Circuit Protection:** The output can be shorted permanently without damage whenever it operates within input voltage range and temperature range specified in this specification .Output current not exceed 0.95A (RMS)

**4.4 OVP:** No exceed 7.2 Vdc

**4.5 OCP:** No exceed 1.2A(RMS)

**4.6 Reverse current:** 1.5 mA (max) @ output connect to DC 5V(QA Test)



## 5. Environmental:

**5.1 Operating Temperature:** 0°C to 40°C

**5.2 Storage Temperature:** -40°C to 85°C

**5.3 Operating Relative Humidity:** 90%RH Max

**5.4 Storage Relative Humidity:** 90%RH Max

**5.5 Altitude:** Operation 0 ~ 2,000m Max.

**6. MTBF:** 50000 hours min.  
@full load at 25C ambient temperature.

<b>7. Safety Requirement:</b>	<b>UL</b> <b>TUV</b> <b>NOM</b> <b>CB</b> <b>CE</b>
<b>8. EMI Requirement:</b>	<b>FCC Class B</b> <b>EN55032 Class B</b> <b>AS / NZS 3548</b>
<b>9. Immunity: ( Criterion Class B )</b>	
<b>9.1 ESD:</b>	<b>EN50082-1: EN 61000-4-2, Level 4</b> <b>Air Discharge +/-15KV ; Contact +/- 8KV</b>
<b>9.2 Surge:</b>	<b>EN 61000-4-5, Level 3,1KV</b>
<b>10. HI-POT test:</b>	<b>Pri. to Sec. 3000VAC 10mA for 1 Minute.</b>
<b>11. Insulation resistance:</b>	<b>Pri to Sec. &gt;7 Mohm Minimum @500Vdc</b>
<b>12. Burn in:</b>	<b>40°C full load</b>
<b>13. Drop Test:</b>	<b>Drop tested from a height of 91 cm, one corner,</b> <b>three edges six surface, no electrical function</b> <b>failure and mechanical structure damage were</b> <b>found during / after test.</b>

### 13. Test item and sequence in production

#### START TEST:

(T1) Hi-POT test the unit at Pri. to Sec. 3300VAC, 10mA, 3 Second.

Insulation resistance test the unit Pri. to Sec. 500VDC the resistance 7M $\Omega$  (Min.)

(1) Set input power to 90Vac/60 Hz and go through (T2~T3).

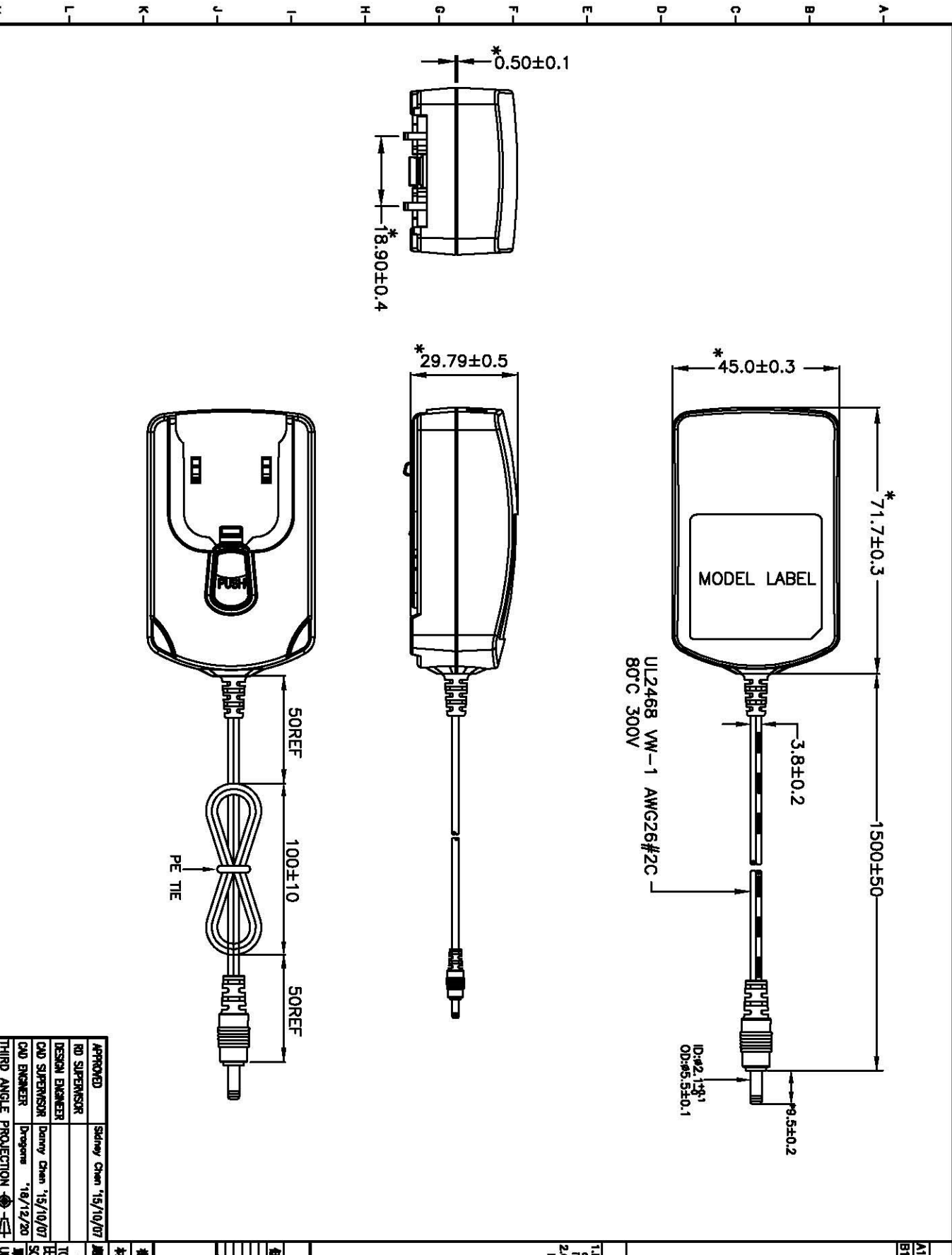
(2) Set input power to 264Vac/50 Hz and go through (T2~T3).

(3) Set input power to 230Vac/50 Hz and go through (T4~T6).

(4) Set ambient to 25 °C

(T2) CONNECTOR	Electronic Load
SET LOAD	Current 0A
MEASURE	Output DC Voltage 4.75V to 5.25V Output Voltage AC ripple Peak to Peak ripple should be less than 200mV
(T3) CONNECTOR	Electronic Load
SET LOAD	Current 1A
MEASURE	Output DC Voltage 4.75V to 5.25V Output Voltage AC ripple Peak to Peak ripple should be less than 200mV
(T4) DISCONNECT	Electronic Load
MEASURE	Power Saving, < 75mW at Cool start of 10 seconds
(T5) CONNECTOR	Electronic Load
SET LOAD	Current 1A
MEASURE	Efficiency > 71.5%
(T6) CONNECTOR	Electronic Load
SET LOAD	Current 0.1A
MEASURE	Efficiency > 64.6%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



修正 REVISIONS	
A1 CHECK & ISSUE:	'18/10/07
B1 ADD MODEL NAME	'18/12/20

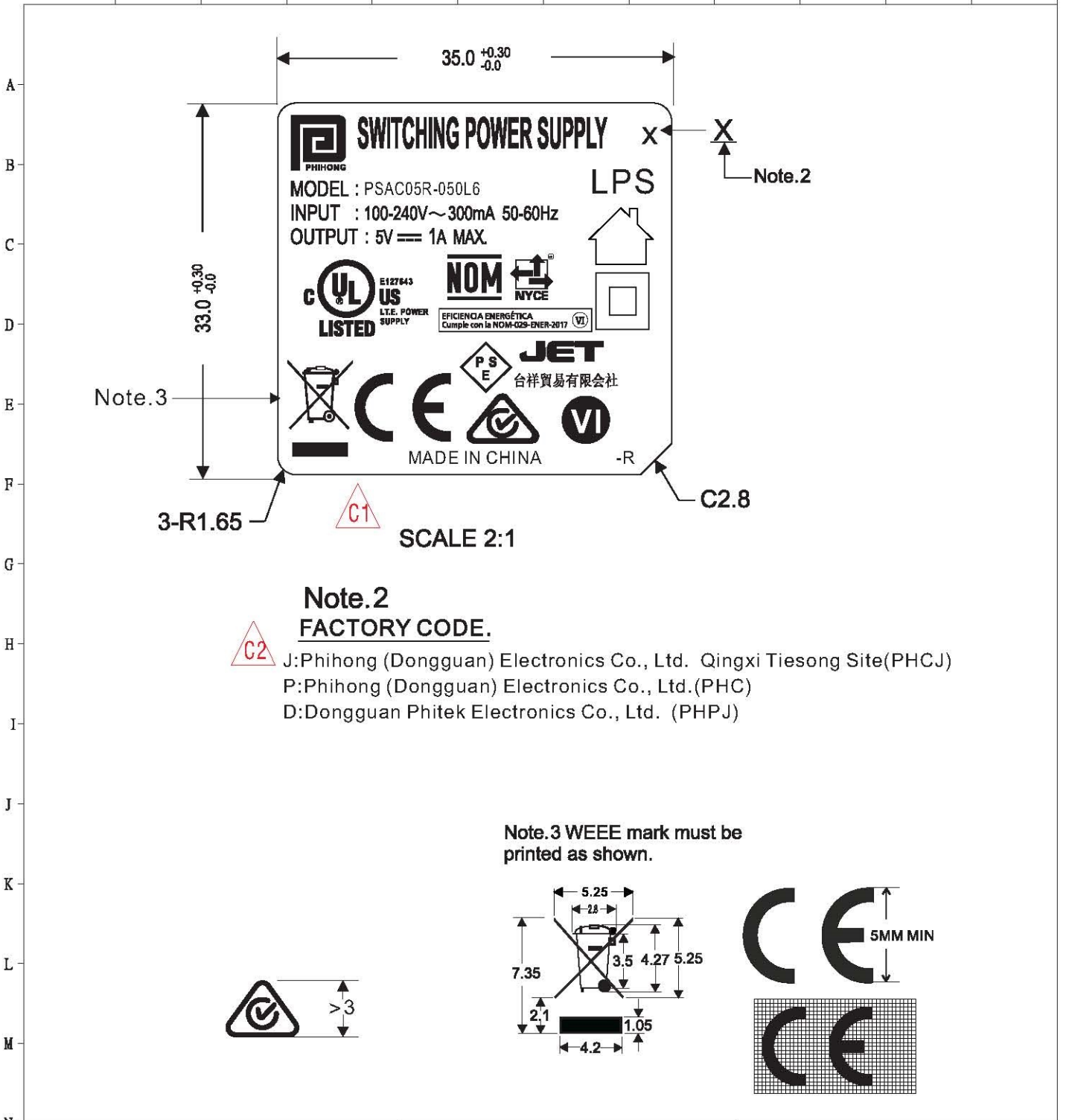
說明 明 GENERAL NOTES

1. Dimensions marked with \* indicate critical dimensions which need to be inspected in every lot.

2. CPK must exceed 1.33 for critical parameters.

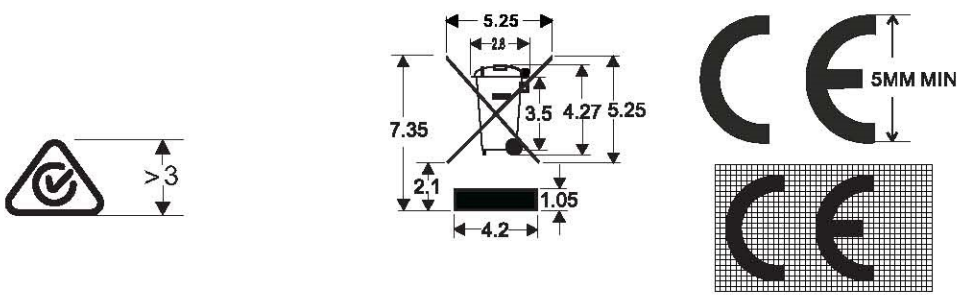
品名 MODEL	物料名稱 MODEL NAME
材質 MATERIAL	物料名稱 MODEL NAME
處理 TREATMENT	物料名稱 MODEL NAME
公差 TOLERANCE	物料名稱 MODEL NAME
比例 SCALE	物料名稱 MODEL NAME
單位 UNIT	物料名稱 MODEL NAME

核准 APPROVED	日期 DATE	核准 APPROVED	日期 DATE
RD SUPERVISOR		RD SUPERVISOR	
DESIGN ENGINEER		DESIGN ENGINEER	
CAD SUPERVISOR		CAD SUPERVISOR	
CAD ENGINEER		CAD ENGINEER	
THIRD ANGLE PROJECTION		THIRD ANGLE PROJECTION	



**Note.2**  
**FACTORY CODE.**  
 C2 J:Pihong (Dongguan) Electronics Co., Ltd. Qingxi Tiesong Site(PHCJ)  
 P:Pihong (Dongguan) Electronics Co., Ltd.(PHC)  
 D:Dongguan Phitek Electronics Co., Ltd. (PHPJ)

**Note.3** WEEE mark must be printed as shown.



修正 REVISIONS				說明 GENERAL NOTES						
A1.CHECK & ISSUE.		'15/11/04		1. TO BE PROVIDED BY PRODUCTION CONTROL DEPT.						
A2.DEL + Mark.		'15/11/25								
A3.Add PSE logo.		'17/07/17								
B1.ADD NOM-029 logo		'18/04/27								
C1.移除下蓋的CE和WEEE的LOGO LOGO移到上蓋		'18/11/26								
C2.新增廠代J:PHCJ		'19/06/03								
長度區分 RANGE		容許公差區分 (MM) COMMON TOLERANCE		核准 APPROVED	Sidney	'19/06/03	機型 MODEL	PSAC05R-050L6-R		
低於 8 LESS THAN	A	B	C	D	審核 CHECKED	Jeary	'19/06/03	材質 MATERIAL		
	8 ~ 25	0.05	0.1	0.2	0.4	安規 SAFETY		處理 TREATMENT		
	25 ~ 80	0.08	0.15	0.3	0.6	設計 DESIGN	Ray Lee	'17/07/17	公差 C TOLERANCE	
	80 ~ 250	0.12	0.25	0.5	1.0	製圖 DRAWN	Annie	'19/06/03	比例 SCALE	×
	250 ~ 800	0.25	0.4	0.8	1.5				單位 MM	
800 ~ 2500	0.5	0.8	1.5	3.0				圖名 DESCRIPTION	LASER ENGRAVING	
角度 ANGULAR	1.0	1.5	3.0	6.0				料號 PART NO.	94201500229-HC2	
	0.15	0.3	0.5	0.8				單位 UNIT	MM	