

**WH** 华兴变压器制造厂有限公司  
**WAH HING TRANSFORMER MFY. LTD.**

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***SPECIFICATION FOR APPROVAL***

**Customer: Ivent Solutions Limited**

**Customer P/N:**

**Customer Rev.:**

**Customer Model No.:**

**Customer ID: I051**

**Wah Hing Model No.: S01726A**

**Wah Hing Rev.: 03**

**Article: SWITCHING POWER SUPPLY(AC-DC)**

**Standard: CB/IEC60950**

**Safety No.: Z1499**

**Catalog No.: EFS00600501000CE**

**Date: 11-Aug-16**

**Remarks:**

*Please note items listed in page.2 that requires your consent for deviation.*



**Designed/Maker**



**Checked by**



**Approved by**

*Please evaluate the samples, sign this approval sheet and return to*

**WAH HING**

- Approved
- Rejected
- Conditional Approved

**Comments:**

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**Customer Approved by :** \_\_\_\_\_

Signature & Date

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**PRODUCT SPECIFICATION**

**Deviation and History**

*Please note items listed below does not meet your specifications and requires your consent for deviation:*


Item	Customer specification	Suggestion specification

Remarks:

\_\_\_\_\_

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 *1	03	Page12: Change 9.0: Nameplate safety Logo "C-Tick" to "RCM".	J.G Ma	11-Aug-16
	02	add label for white box.	J.G Ma	28-Oct-14
	01	Page10 and 11: add UL/VDE/BS Plug (Detachable), Page12 : Change Label, Page13:add Packing	J.G Ma	20-Dec-13
	00	First issue.	J.G Ma	20-Aug-13
Item	Rev	Description	Sign	Date

History

Customer P/N: \_\_\_\_\_ Wah Hing Model No.: S01726A

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## 1.0 INTRODUCTION

The document specifies the AC/DC switching power supply with one output, the total output power is 5 W Max. The unit meet ROHS directive of the European Union. The unit meet Energy Star V

## 2.0 INPUT CHARACTERISTICS

- 2.1 Input Voltage : AC100-240 V Performance guarantee  
Input Voltage Range : AC90-264 V
- 2.2 Input Current : 0.4Arms max. @ AC100-240 V full load
- 2.3 Operating Frequency : 50-60 Hz  
Operating Frequency Range : 47-63 Hz
- 2.4 Standby Power :  $\leq 0.3W$  @ AC115-230 V rated voltage
- 2.5 Input Fuse : 10  $\Omega$  1W fusible resistor
- 2.6 Input Connector : US/EU/UK/AU Interchangeable Plug

## 3.0 OUTPUT CHARACTERISTICS

- 3.1 Output Voltage : DC5.0V $\pm$ 5% @ AC100-240 V
- 3.2 Output Current  
Rated loading current : 1000 mA  
Minimum loading current : 0 A
- 3.3 Ripple and Noise : 200 mV<sub>p-p</sub> max. @ AC100-240 V full load  
Ambient temp. 25°C

The measurement for differential ripple and noise the output will be using oscilloscope, with 20MHz bandwidth. A 10uF electrolytic capacitor and a 0.1uF ceramic capacitor should be parallel with output load.

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3.4 Efficiency : 68.17 % min. @ AC115/230V

After temperature is saturated, measurement be made at DC cord output terminals.

3.5 Line Regulation :  $\pm 1\%$  @ AC100-240 V full load

3.6 Load Regulation :  $\pm 5\%$  @AC100-240V rated voltage

3.7 Hold-up Time : 10mS min @ AC100 -240V full load

When the power supply turns off the output voltage shall hold up more than 10mS.

3.8 Start up time : 3S max @AC100-240V rated voltage

During turn on output voltage shall not exceed its nominal voltage by more than 10% and all output shall reach their steady state values within 3seconds of turn on

#### 4.0 PROTECTION FUNCTION

4.1 Over-current Protection : 2.0Amax @AC100-240V rated voltage

The power supply shall be hiccupped when any output operating in overload condition (set@ MAX2.0A ) under any line condition for an indefinite period of time the power supply shall be auto recovered when the fault condition is removed.

4.2 Short circuit protection :

The power supply shall be hiccupped and no damage shall be occurred when any output operating in over temperature conditions under any line conditions for an indefinite period of time the power supply shall be auto recovered when the fault condition is removed.

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4.3 Over Temperature Protection : N/A

The power supply shall be hiccupped and no damage be occurred when any output operating in over temperature conditions under any line conditions for an indefinite period of time. The power supply shall be auto recovered when the fault condition is removed.

## 5.0 ENVIRONMENTAL CONDITION

### 5.1 Non-operation

5.1.1 Ambient temperature : -20-70 °C

5.1.2 Relative humidity : 10-90 %

The power supply shall be capable of withstanding the above environmental conditions for extended periods of time, without sustaining electrical and/or mechanical damage and subsequently operational deficiencies.

### 5.2 Operating

5.2.1 Ambient temperature : 0-40 °C

5.2.2 Relative humidity : 20-80 %

The power supply shall be capable of operating continuously in any mode without performance deterioration in the above environmental condition.

## 6.0 SAFETY AND EMC STANDARD

6.1 Safety standard : CB/IEC60950

6.2 EMC Standard : VCCI Class II; FCC class B;  
EN55022 class B

6.3 Immunity to electrostatic discharge(ESD) according : EN61000-4-2

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6.4 Immunity to radiated electromagnetic field according : EN61000-4-3

6.5 Immunity to electrical fast transients(burst) according : EN61000-4-4

6.6 Surge capability according : EN61000-4-5

6.7 Immunity to conducted disturbances,induced by radio frequent fields according : EN61000-4-6

6.8 Immunity to voltage dips short interruptions and voltage variations, test according : EN61000-4-11

6.9 Dielectric strength

Primary to secondary : AC3000V 60S Cut off current 5mA

6.10 Insulation Resistance

Primary to secondary : DC500V 60S 10MΩ MIN

## 7.0 RELIABILITY AND QUALITY CONTROL

### 7.1 Burn-in

7.1.1 Burn-in Ambient temperature : 40 °C

7.1.2 Burn-in Time : 2-4 hr.

AC source 120Vac/60Hz, 80-100% loading.

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8.0 MECHANICAL

8.1 Case

8.1.1 Case Material : Plastic

8.1.2 Case Dimension : L76\*W42.6\*H38 mm

8.1.3 Case Colour : Black

8.2 Weight(Adaptor unit) : 83 g (about)

8.3 Input plug type : US/EU/UK/AU Interchangeable Plug

8.4 Output terminal

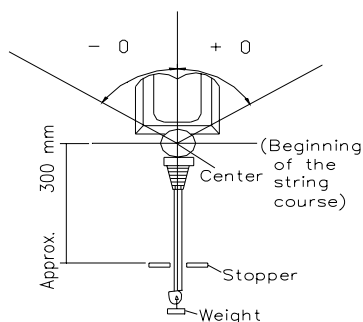
8.4.1 Output cord : UL2468 AWG22 1800+/-50mm out of case

8.4.2 Output plug type : 2.1\*5.5\*10.0 mm, straight female

8.4.3 Output plug center polarity : + (Positive)

8.4.4 Flexibility test : SR: 1200 Cycles, loading 200g

DC Plug: 600 Cycles, loading 200g



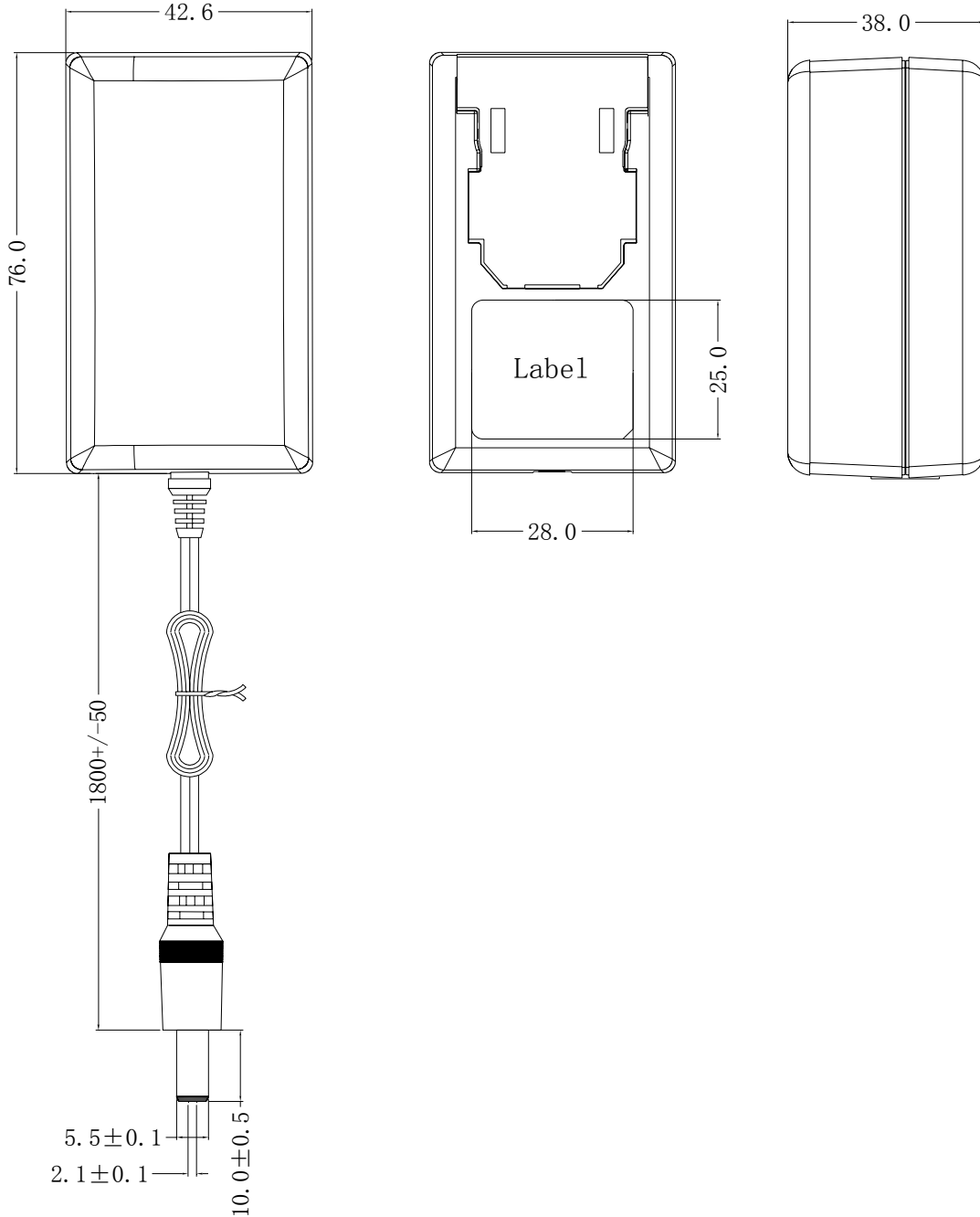
Bend in obverse at rate 20 time/min. and at an angle of  $\pm 60^{\circ}$ . Number of broken wire. Disconnection rate of the wire shall be 30% or less. and no abnormality on appearance.

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8.5 Dimensions And Diagram



**Notice:**

1. Unit: mm
2. Tolerance: X: +/-1.0; X.X: +/-0.5; X.XX: +/-0.30
3. The otherwise tolerance is follows: ±0.2

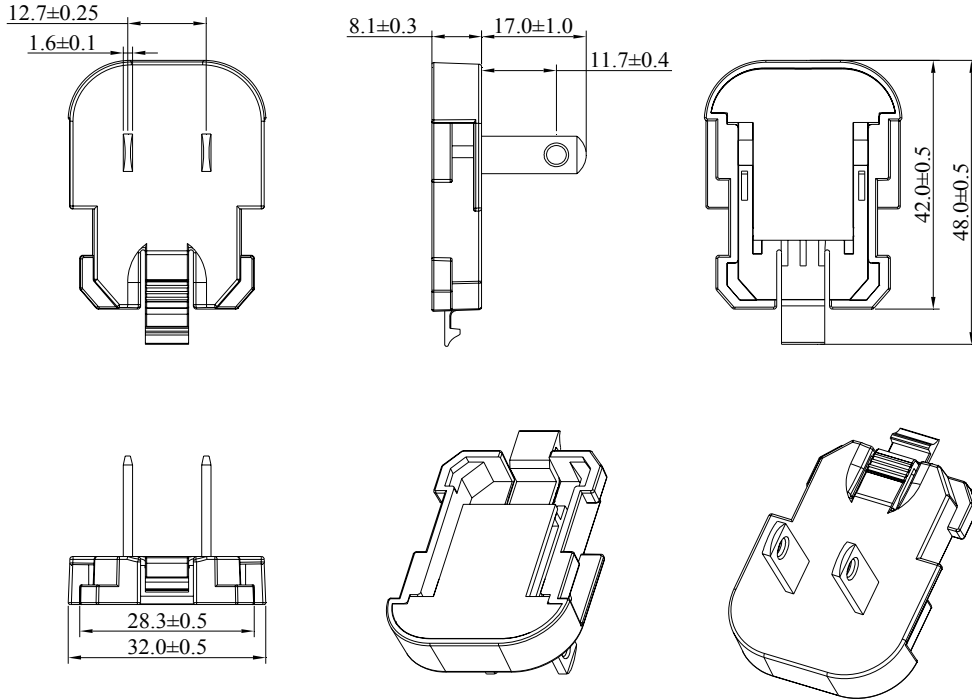
Customer P/N:

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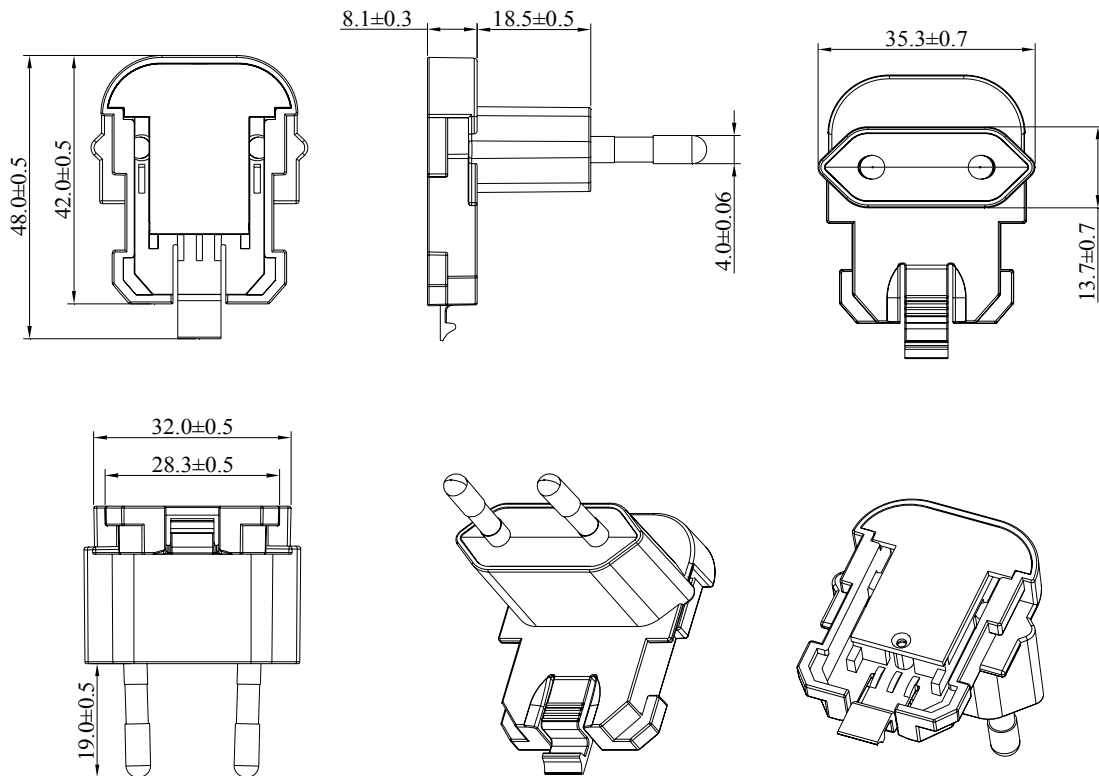


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8.5.1 US Plug Dimensions and Diagram



8.5.2 EU Plug Dimensions and Diagram



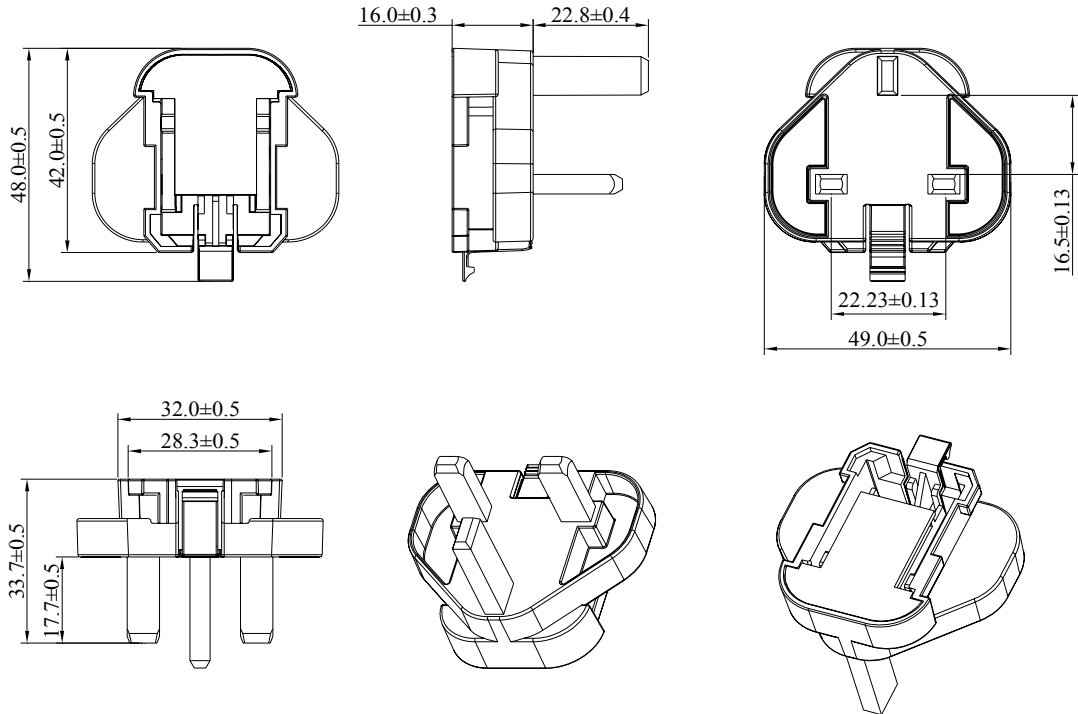
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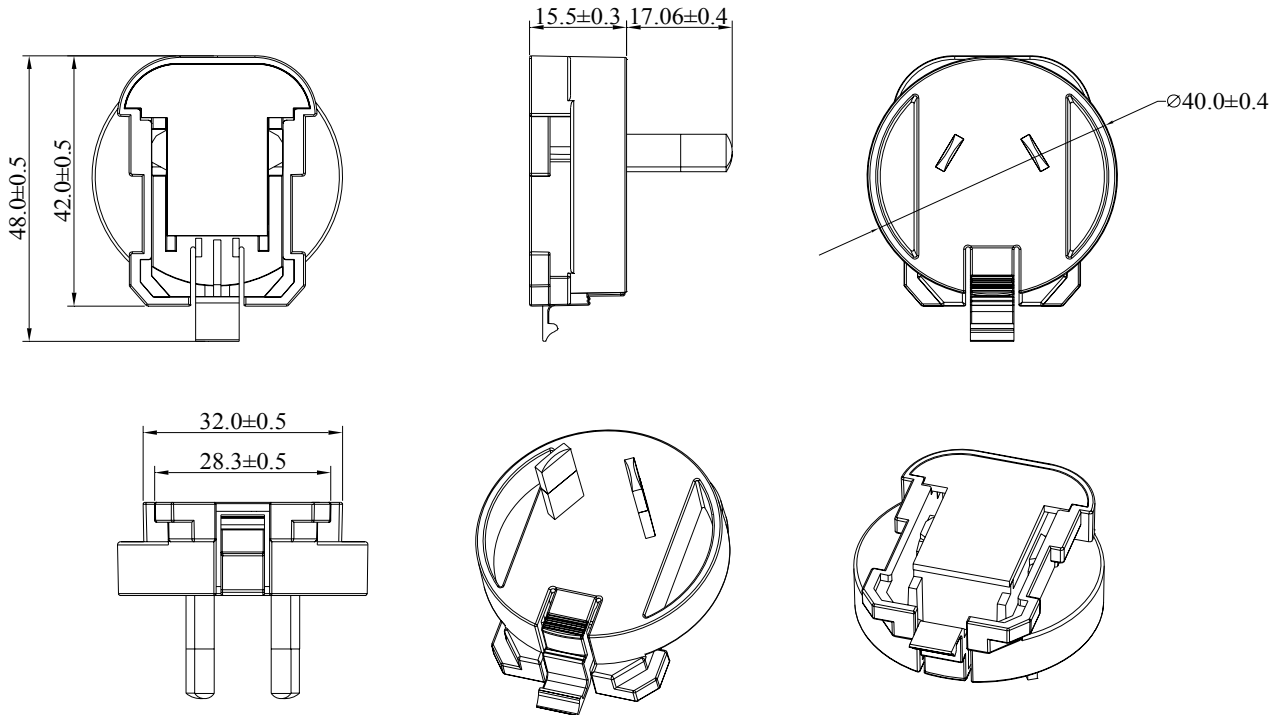


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8.5.3 UK Plug Dimension and Diagram



8.5.4 AU Plug Dimensions and Diagram



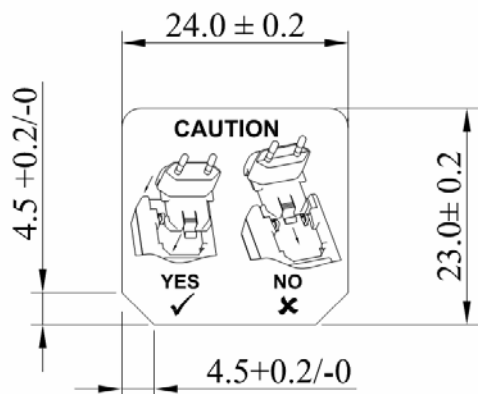
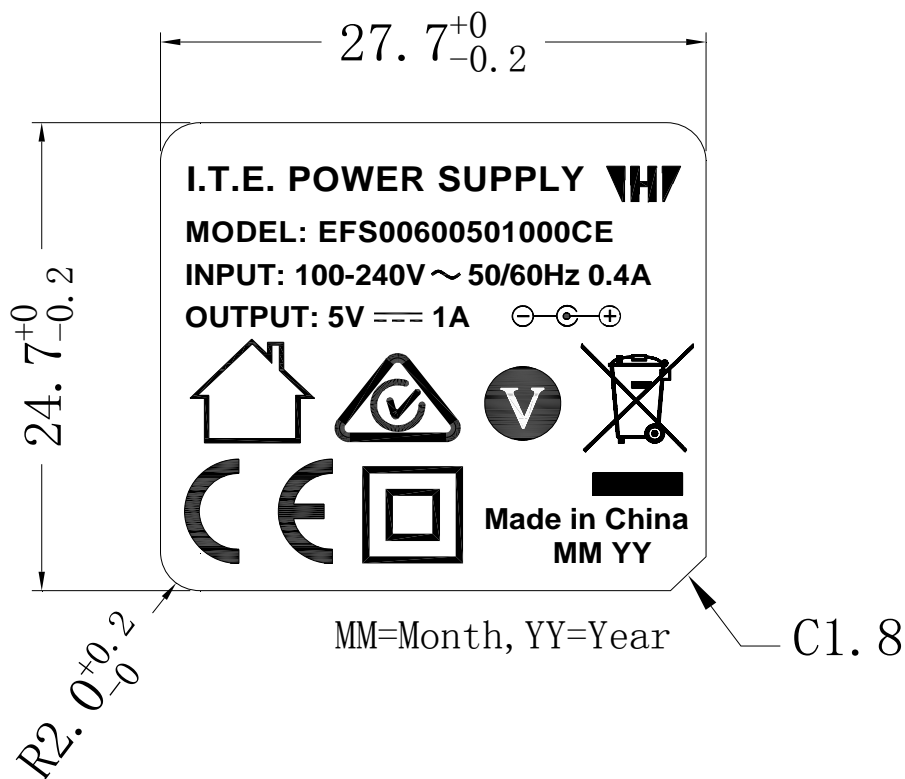
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9.0 PROPOSED ARTWORK MARKING

01



Notice:

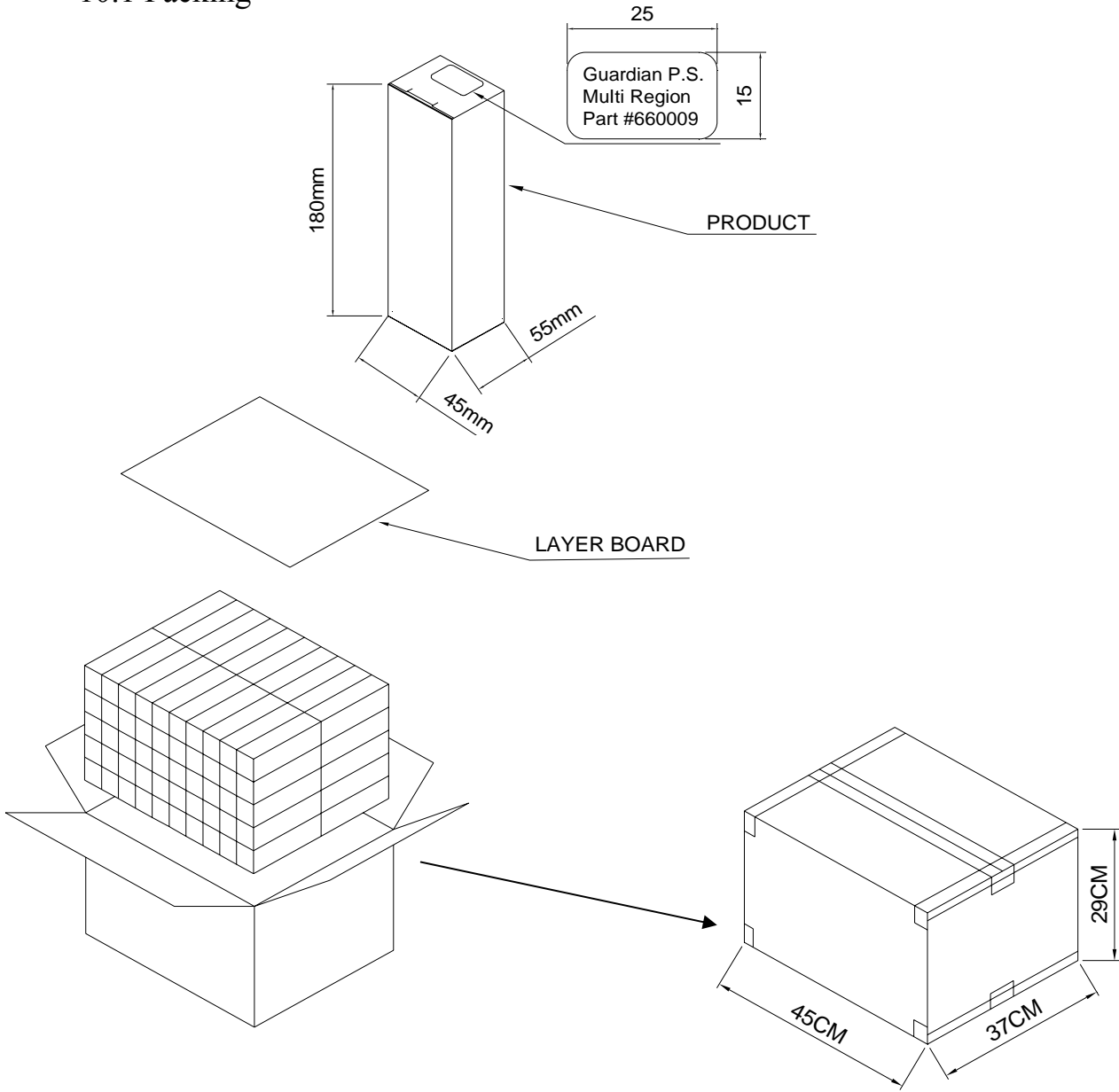
1. Unit : mm
2. Scale : None
3. Material : Using laser printing.
4. The otherwise tolerance is follows: ±0.2

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10.0 APPENDIX  
 10.1 Packing



1.0 20PCS/LAYER,TOTAL 5LAYERS  
 2.0 100PCS/CARTON

Packing description:

	L	W	H
Size (cm)	45	37	29
Tolerance	+2/-0	+2/-0	+2/-0
QTY (pcs)	100		
G. W. (Kg)	17.3		

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