



IDEAL POWER  
IDEAL POWER SOLUTIONS

# FOR APPROVAL

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

DESCRIPTION: I.T.E. POWER SUPPLY REV: (A0)

HKSC-070697EP

MODEL NO: HK-HP-A09

PART NO: ROHS Compliance

DESIGNED NO: 070697-0615 DATE: JUN.16th.2007

APPROVED SIGNATURES			

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## 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +9V, and electronic process. The switching power supply will provide power for technology equipments including electrical business equipment. The adaptor meets the requirement of lead free and RoHS.

## 2.0 INPUT REQUIREMENTS

2.1 Input Voltage Range: 100(-10%)VAC to 240(+10%)VAC

2.2 Input Frequency Range: 47 Hz to 63 Hz

2.3 Input Power Consumption at no-load : 0.5W MAX

2.4 Input In-rush Current: 50A Max

2.5 Input Current: 0.8A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +9V

3.2 Output Regulation: 8.55V~9.45V

3.3 Output Load Range: 0~2.5A

3.4 Output Ripple & Noise: 90mV Max @20MHz BANDWIDTH WITH

22UF/50V CAPACITANCE AND 104/50V CERAMIC CAPACITOR

4.0 EFFICIENCY:  $\geq 78.02\%$  @ AVERAGE OF 25/50/75/100% LOADS & 115 VAC INPUT

5.0 LINE REGULATION: 2% MAXIMUM

6.0 HOLD UP TIME: 10ms MIN AT 110VAC FULL LOAD.

7.0 TURN ON TIME: 2S MAX AT 110VAC FULL LOAD.



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8.0 TEMPERATURE COEFFICIENT: 0.05%/°C

9.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

9.1 Finished product withstands AC 3.0KV, for 2 second, 4mA max primary to secondary.

9.2 Finished product withstands AC 3.0KV, for 2 second, 4mA max primary to case.

10.0 INSULATION RESISTANCE

Primary to secondary: 50MOHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 2 amps inner current fuse to protect itself.

11.2 Output Protection

11.2.1 Output Current:

Overload conditions shall decrease the output current. Removal of an output Overload shall provide automatic recovery for the output voltage.

11.2.2 Short Circuit Protection: Auto Recovery.



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## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

12.1 Storage Temperature:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$

Relative Humidity: 10% ~ 95%

12.2 Operation Temperature:  $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$

Relative Humidity: 10%~95%

## 13.0 EMI / EMC

The switching power supply has approved by the following standards:

FCC PART 15B

(1)EN55022(EN61000-3-2. EN61000-3-3)

(2)EN55024(IEC61000-4-2. IEC61000-4-3.

IEC61000-4-4. IEC61000-4-6. IEC61000-4-8.

IEC61000-4-11.)

## 14.0 RELIABILITY AND QUALITY CONTROL

### 14.1 Burn-in

The burn-in test will be performed at least 2 hours at 40 centigrade degrees under full load condition.

### 14.2 MTBF

When the operation is complying with this specification, the switching power supply s MTBF will be 50,000 hours at 25 centigrade degrees.

## 15.0 SAFETY

The switching power supply has approved by the following safety standards:

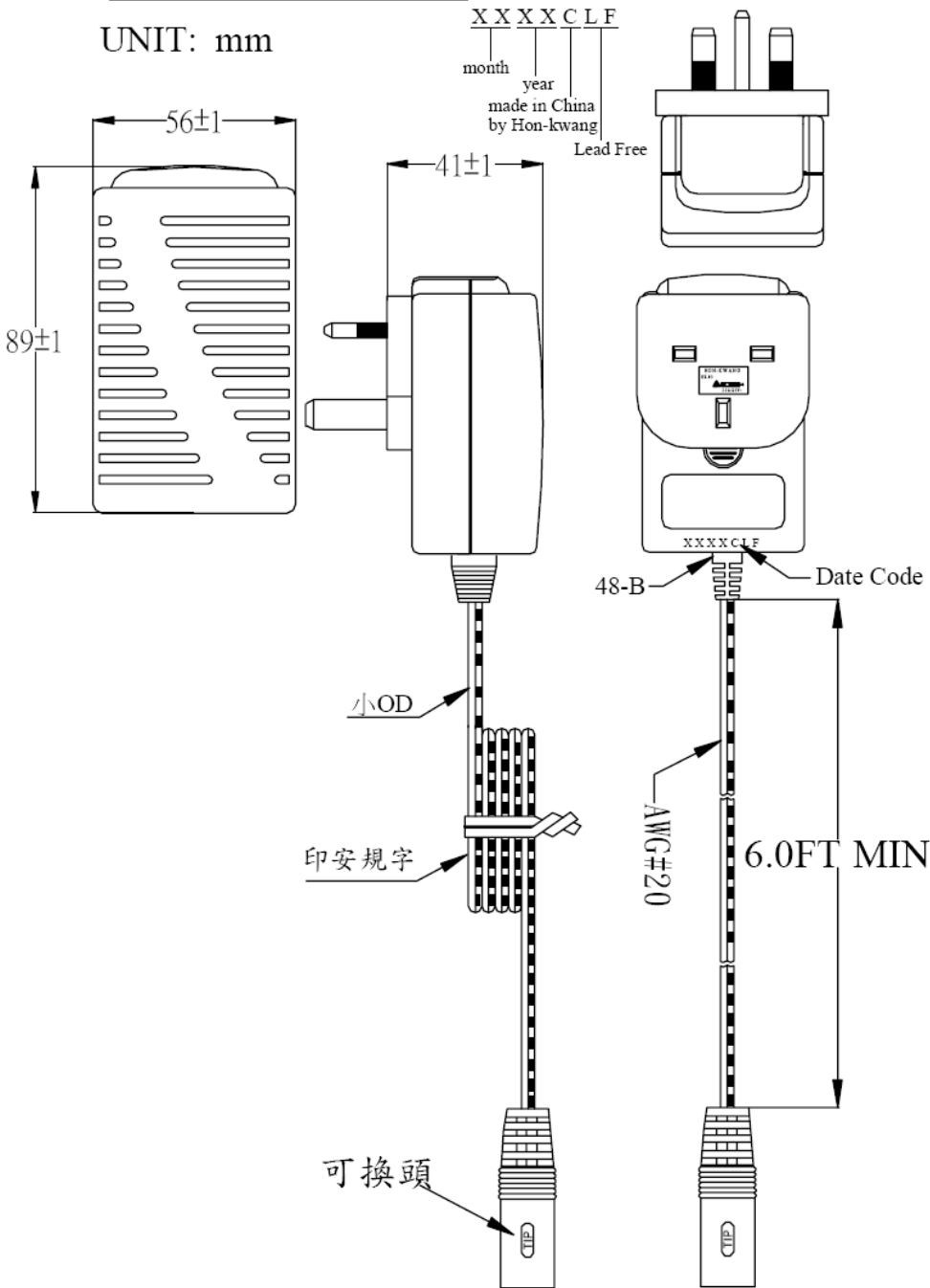
UL60950-1 (First Edition) CAN/CSA-C22.2 No.950-95

IEC60950-1: 2001, EN60950-1: 2001

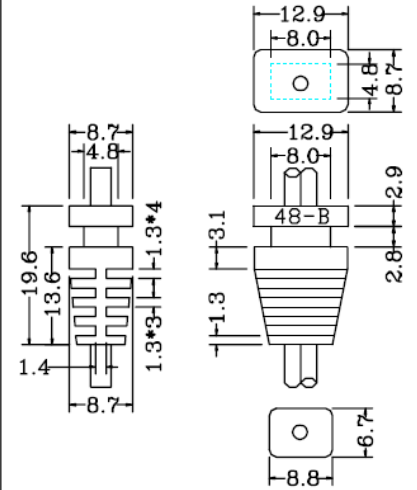
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### 16. OVERALL DRAWING

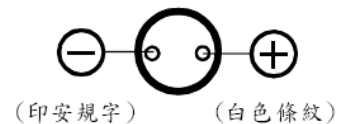
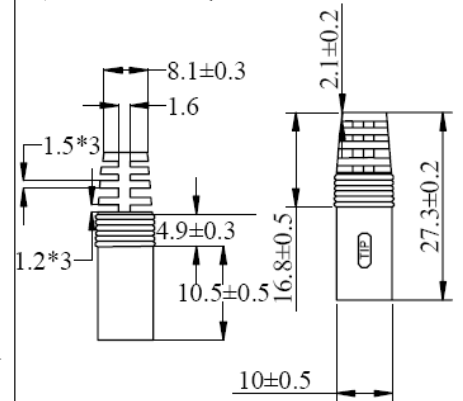
UNIT: mm



未注標尺寸公差: ±0.2

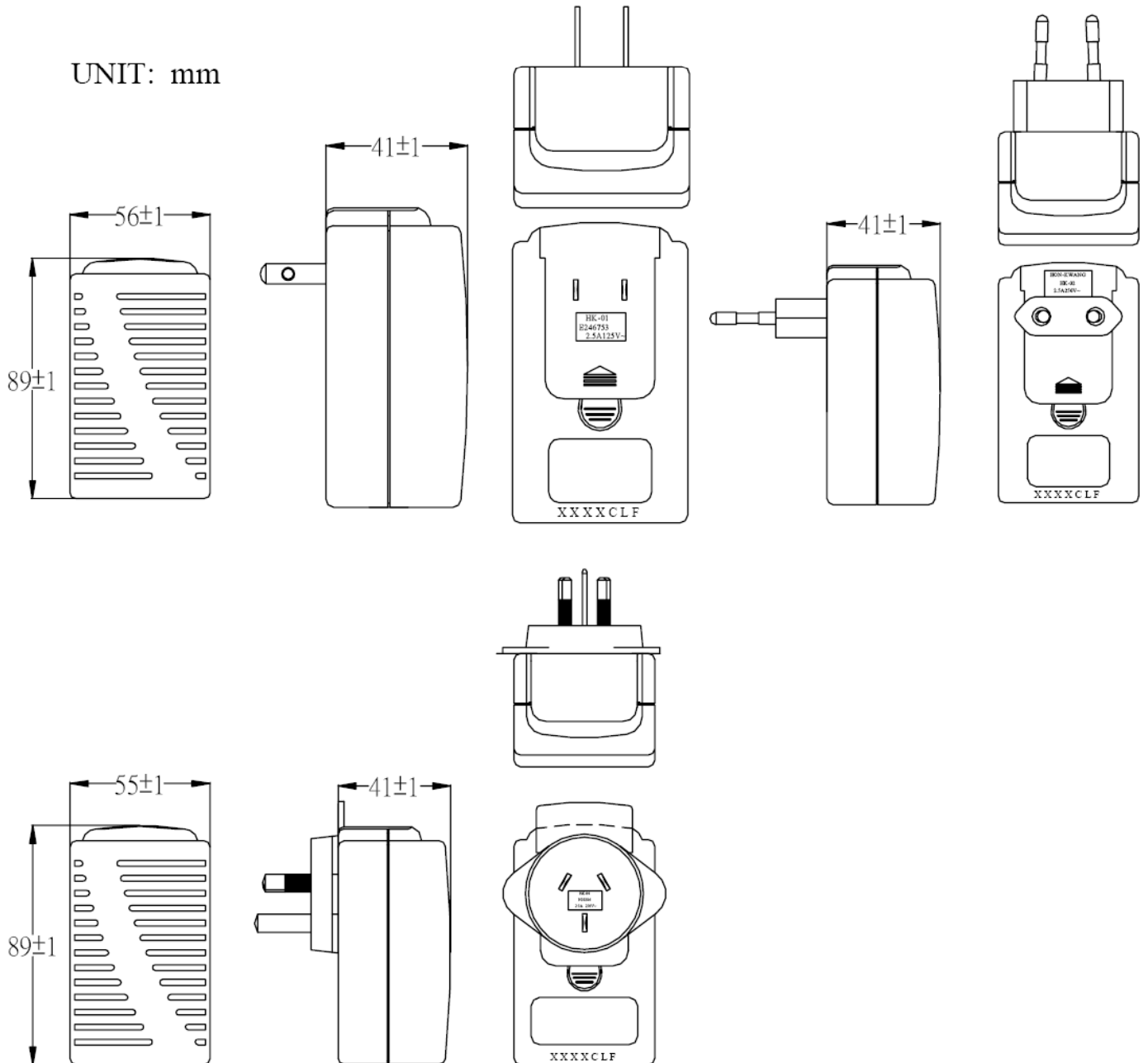


未注標尺寸公差: ±0.2



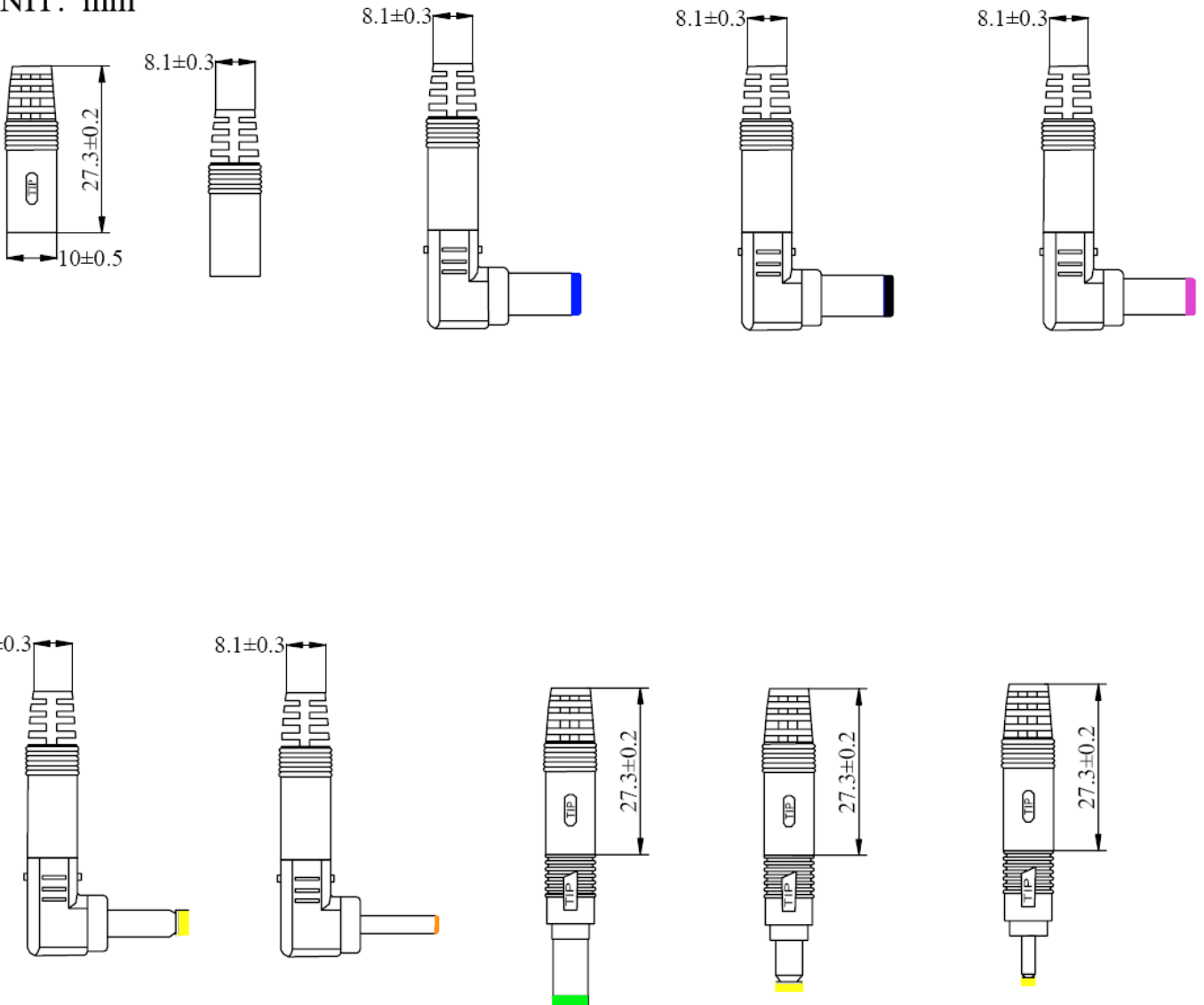
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UNIT: mm



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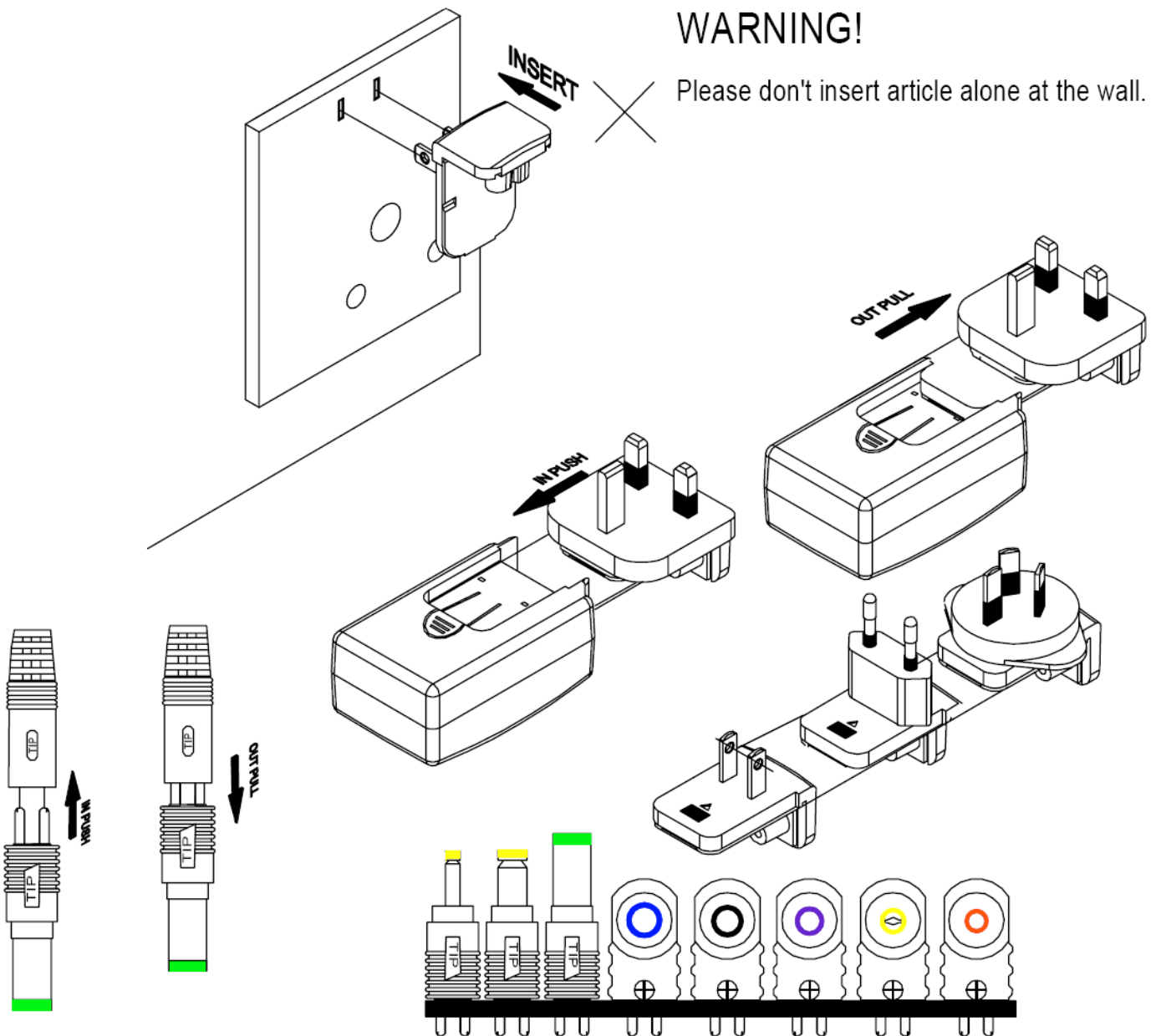
UNIT: mm





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## 17. USE SPECIFICATION



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## 18. PACKING

### 18.1 Inner Box

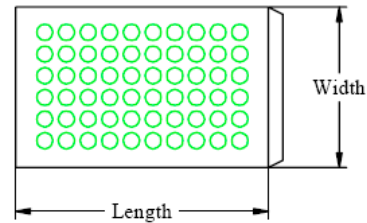
UNIT: mm

Bubble bag only used for samples, not for finished products.

BUBBLE BAG

Length : 160

Width : 150

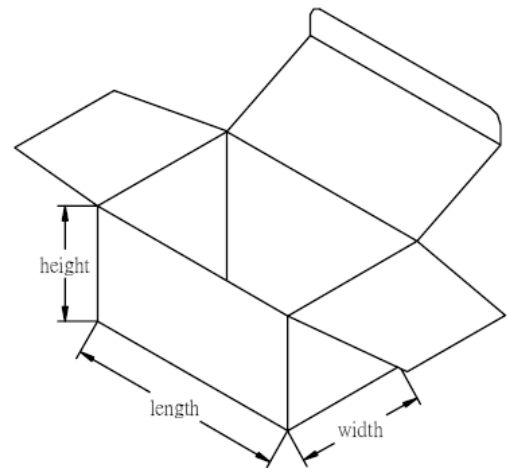


BOX

Length:143

Width:70

Height:60



### NOTICE:

Its probably different from the white box of the sample and the figure dimension.  
The white box is used to pack during product.

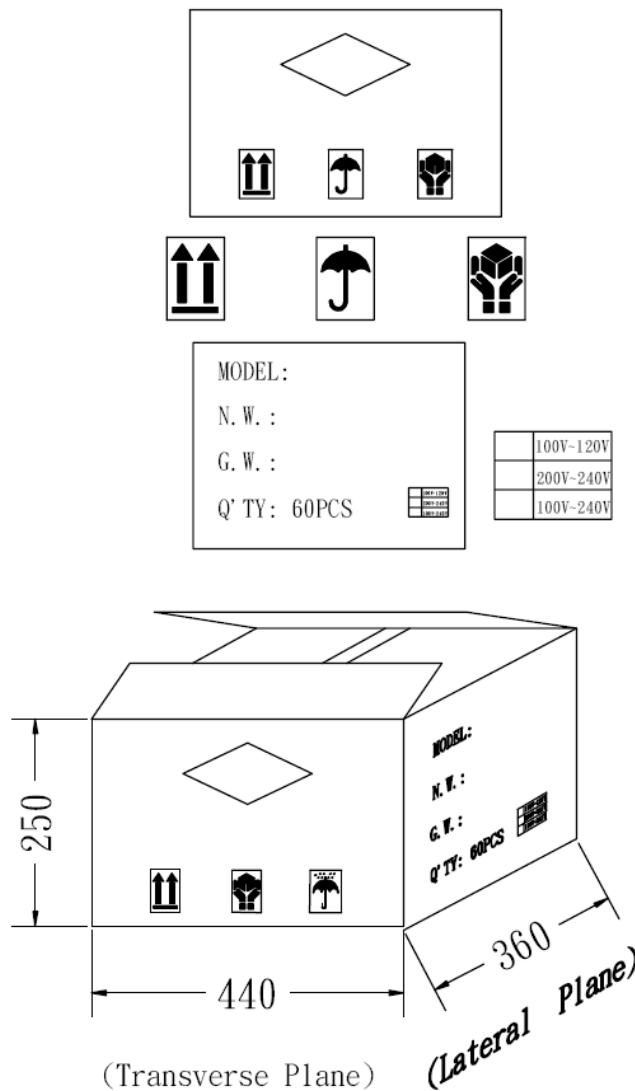
注意:樣品使用的小白盒尺寸可能與此圖面尺寸不同,此圖面尺寸是用于生產時的包裝.

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## 18. PACKING

### 18.2 Carton

UNIT: mm





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19. MARKING

0.2mm 變色龍 NAME-PLATE:SILVER CHARACTERS BLACK BACKGROUND.

UNIT: mm

