

# SPECIFICATION

## High Quality Switching Power Adapter

**Universal AC Input  
18W 9V 2A  
Single Output**

**P/N:A090020HK1**

**\*\* Specification Approval\*\***

This specification (total 9 pages including cover page) is approved in it's entirety by:

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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: 0.6A Max

## 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +9V

3.2 Output Regulation: 8.55V~9.45V

3.3 Output Load Range: 0~0.5A

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

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

4.0 EFFICIENCY: 63.53%@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.

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 1 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.

## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

### 12.1 Storage Temperature:-20 ~ +70

Relative Humidity: 10% ~ 95%

### 12.2 Operation Temperature:0°C~40°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.

## 15.0 SAFETY

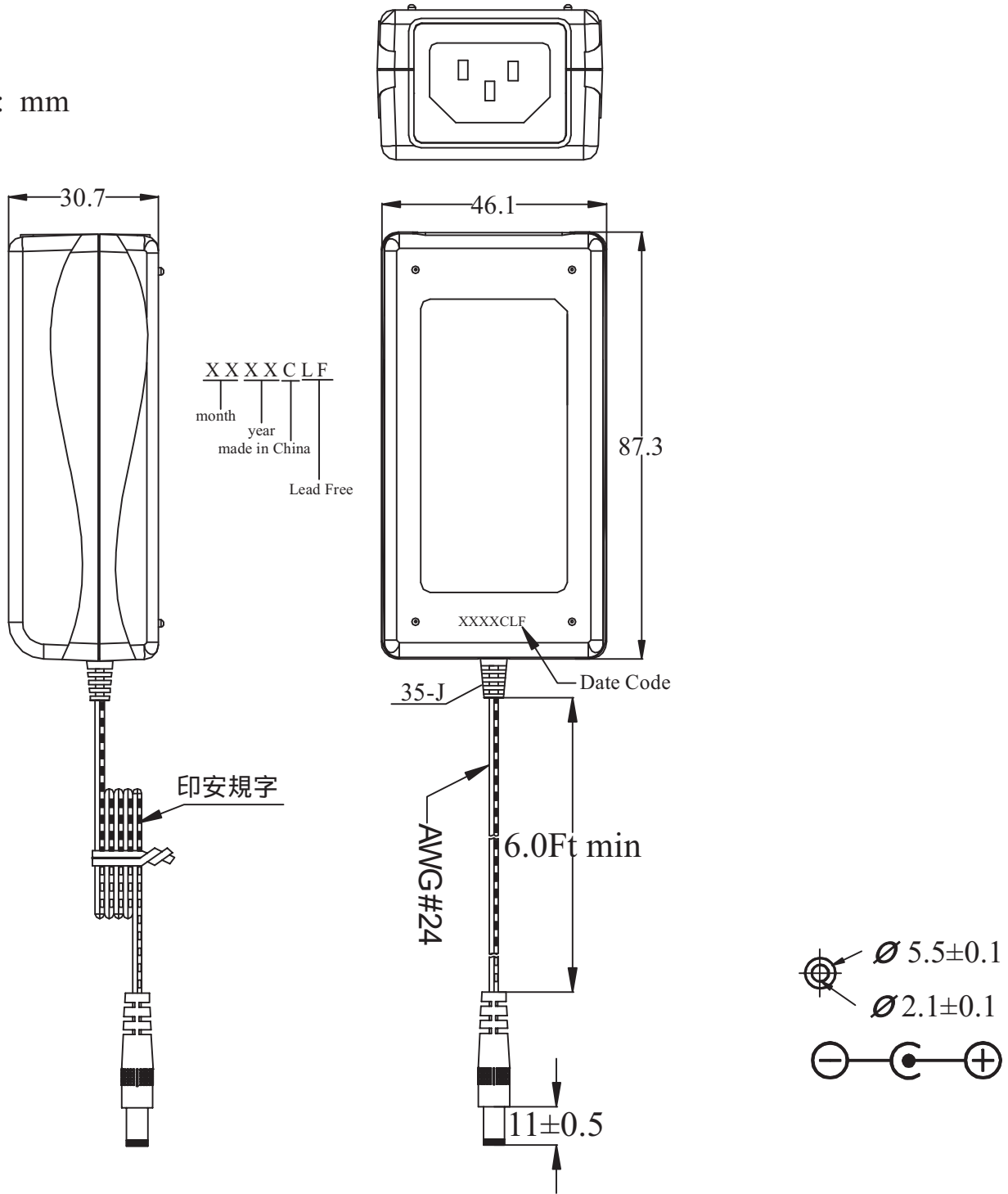
The switching power supply has approved by the following safety standards:

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

IEC60950-1: 2001, EN60950-1: 2001

### 16. OVERALL DRAWING

UNIT: mm



### 17. INNER PACKING

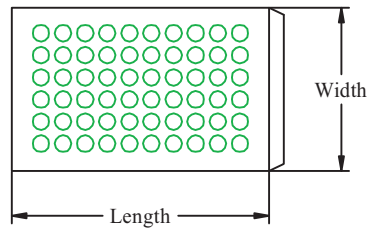
#### 17.1 Inner Box

UNIT: mm

BUBBLE BAG

Length : 150

Width : 120

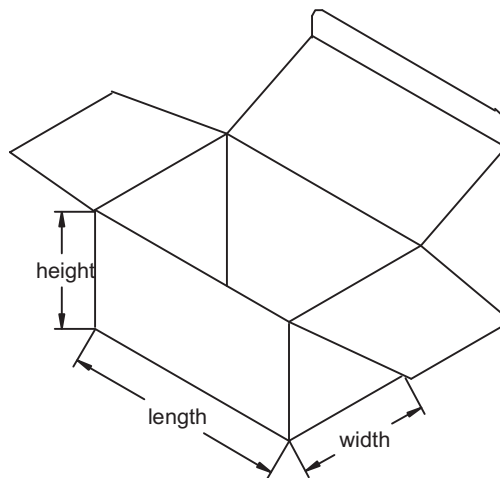


BOX

Length: 95

Width: 60

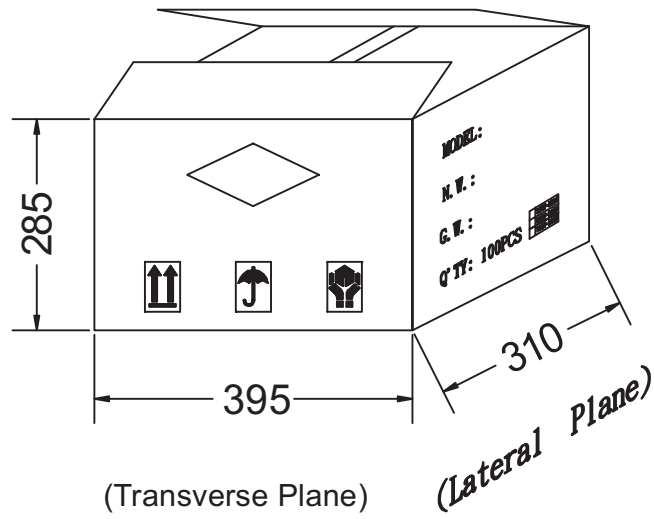
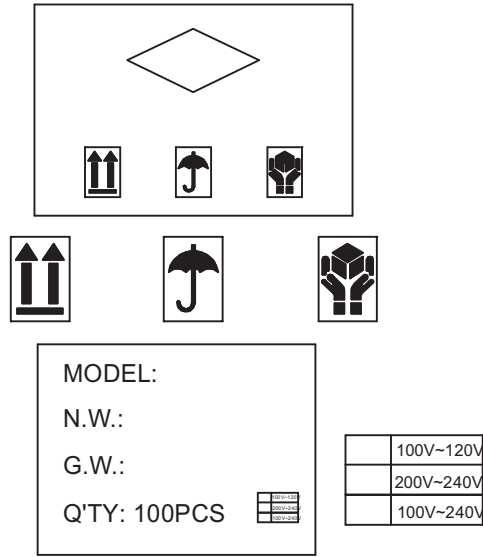
Height: 55



### 18. OUTER PACKING

#### 18.1 Carton

UNIT: mm





19. MARKING

UNIT: mm

