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## **1.0 INTRODUCTION**

This document specifies a switching power supply with a output of +12V, and electronic process. The switching power supply will provide power for technology equipments including electrical business equipment.

## **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 In-rush Current: 60A Max (Actual test result is 16.5A )

2.4 Input Current: 0.6A Max

## **3.0 OUTPUT REQUIREMENTS**

3.1 Output Voltage: +12V

3.2 Output Regulation: +/- 5%

3.3 Output Load Range: 0~2A

3.4 Output Ripple & Noise: 120mV Max @20MHz BANDWITH

## **4.0 EFFICIENCY:** 78% @ FULL LOAD & 120 VAC INPUT

## **5.0 DIELECTRIC STRENGTH (Hi-Pot) TEST**

5.1 Finished product withstands AC 3.0KV, for 2 second, 4mAmax primary to secondary

5.2 Transformer withstands AC 3.0KVrms, 60Hz for 1 minute, primary to secondary.

5.3 Transformer withstands AC 3.0KV, 60Hz for 1 minute, primary to core.

## **6.0 INSULATION RESISTANCE**

Primary to secondary: 50MOHM to 500VDC.

## **7.0 PROTECTION**

### **7.1 Input Protection**

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

### **7.2 Output Protection**

### 7.2.1 Output Current:

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

### 7.2.2 Short Circuit Protection: Auto Recovery.

### 7.2.3 Over Voltage Protection: 14V±1V

## **8.0 ENVIRONMENTAL CONDITIONS**

The switching power supply can withstand the following environmental conditions:

### 8.1 Storage Temperature:-20°C ~ +70 °C

Relative Humidity: 10% ~ 95%

### 8.2 Operation Temperature:0°C~40°C

Relative Humidity: 10%~95%

## **9.0 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)

## **10.0 RELIABILITY AND QUALITY CONTROL**

### 10.1 Burn-in

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

### 10.2 MTBF

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

## **11.0 SAFETY**

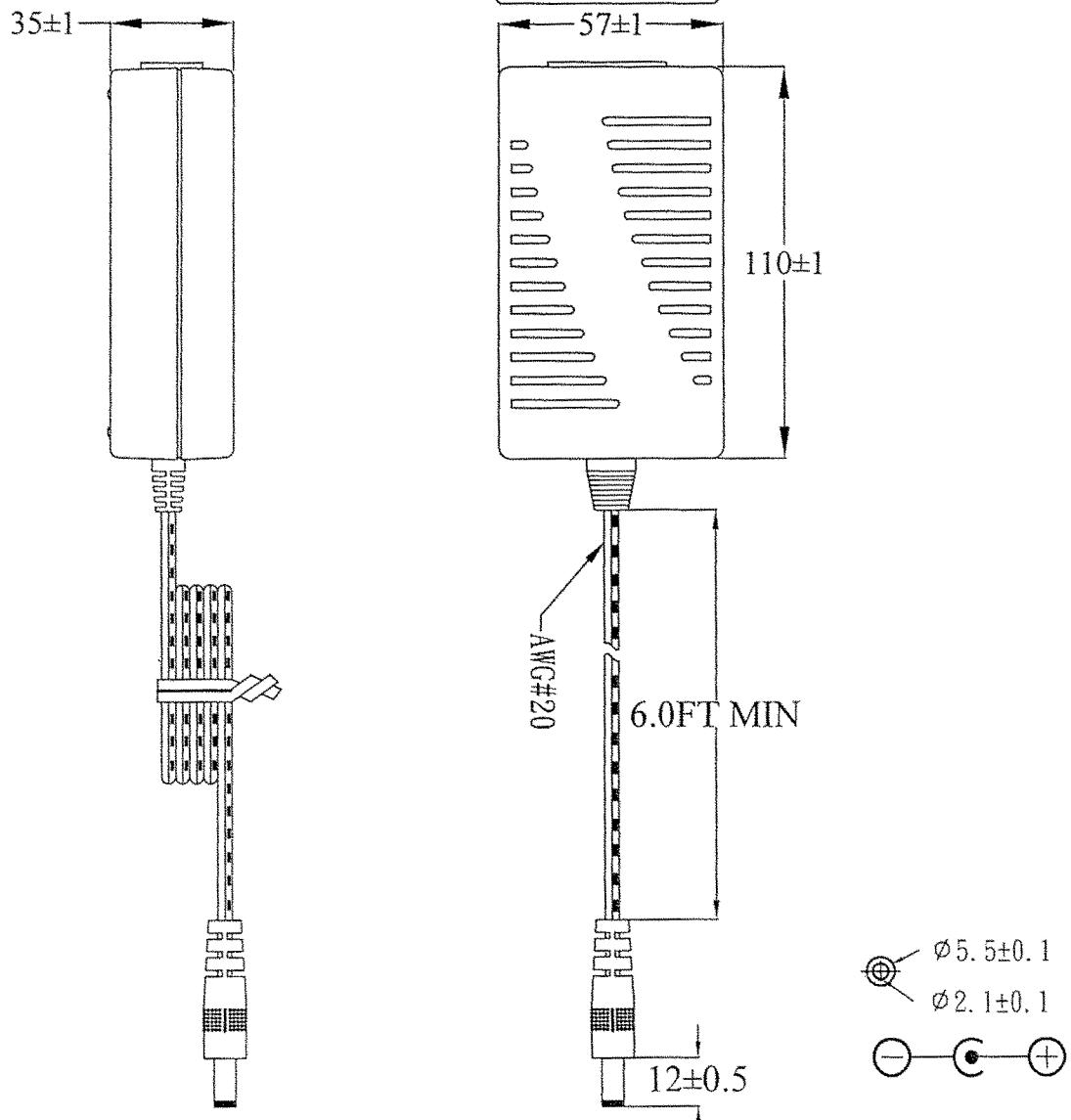
The switching power supply has approved by the following safety standards:

UL1950 (Third Edition),CAN/CSA-C22.2 No.950-95,

IEC 60950:1999,EN60950:2000

**12. OVERALL DRAWING**

UNIT: mm



### 13. PACKING

#### 13.1 Inner Box

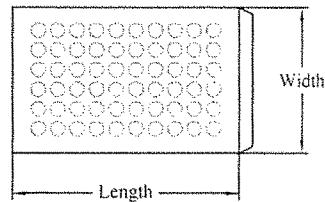
UNIT: mm

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

#### BUBBLE BAG

Length :160

Width : 150

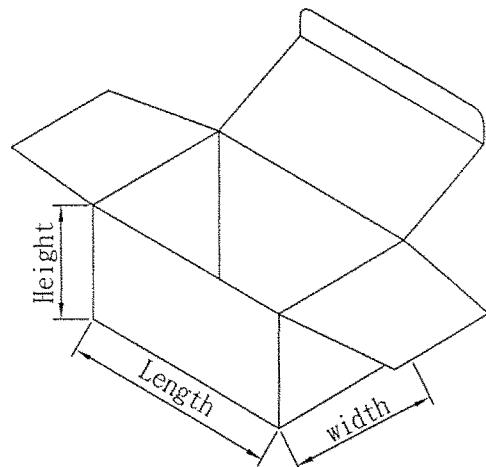


#### BOX

Length:125

Width:60

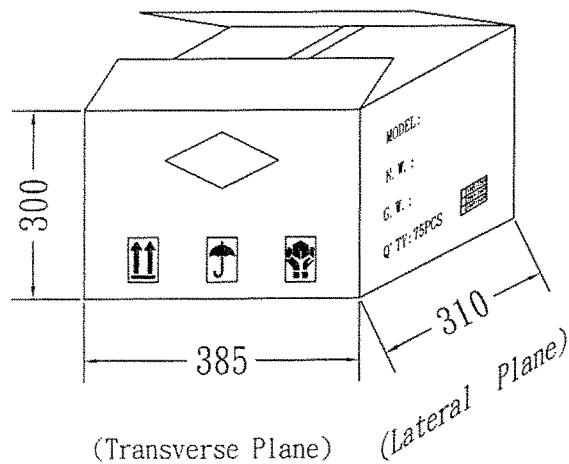
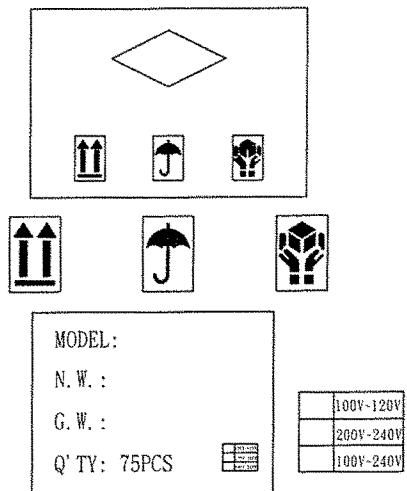
Height:58



### 13. PACKING

#### 13.2 Carton

UNIT: mm



**14. MARKING**

0.2mm PVC NAME-PLATE: SILVER CHARACTERS BLACK BACKGROUND.

UNIT: mm

