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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: 11.4V~12.6V

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

## 11.0 SAFETY

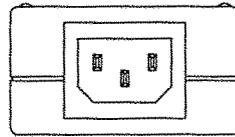
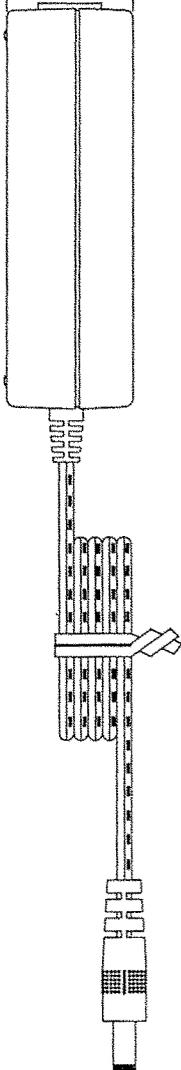
The switching power supply has approved by the following safety standards:

UL1950 (Third Edition),CAN/CSA-C22.2 No.950-95,  
IEC 60950:1999,EN60950:2000

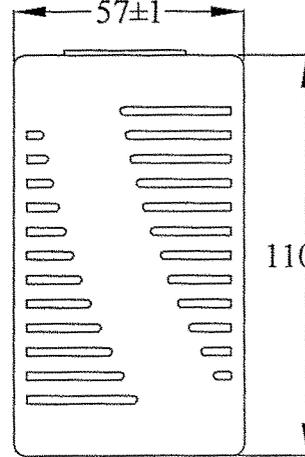
12. OVERALL DRAWING

UNIT: mm

35±1



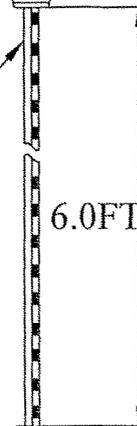
57±1



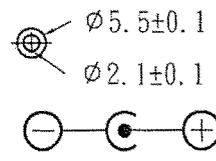
110±1

AWG#20

6.0FT MIN



12±0.5



### 13. PACKING

#### 13.1 Inner Box

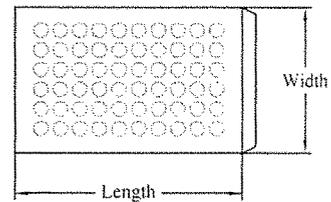
UNIT: mm

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

BUBBLE BAG

Length :160

Width : 150

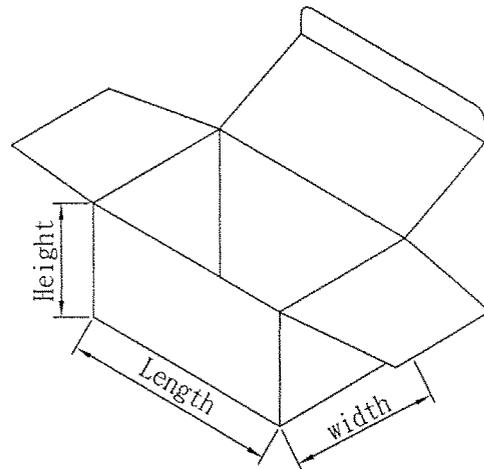


BOX

Length:125

Width:60

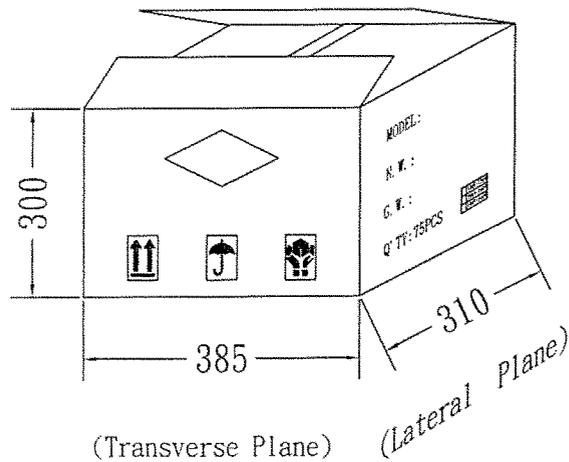
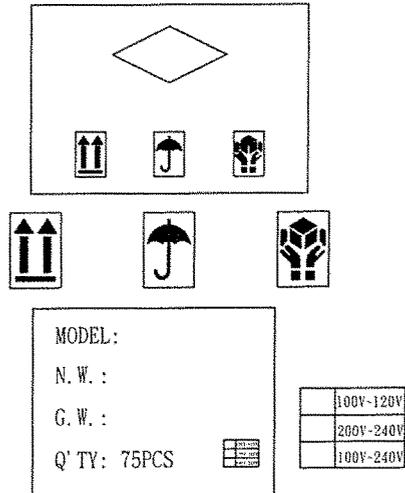
Height:58



### 13. PACKING

13.2 Carton

UNIT: mm



#### 14. MARKING

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

UNIT: mm

