

1.0 INTRODUCTION

This document specifies a switching power supply with a output of +5V, 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: 100VAC(-10%) to 240VAC(+10%)
- 2.2 Input Frequency Range: 47 Hz to 63 Hz
- 2.3 Input In-rush Current: 50A Max (Actual test result is 16.8A)
- 2.4 Input Current: 0.60A Max

3.0 OUTPUT REQUIREMENTS

- 3.1 Output Voltage: +5V
- 3.2 Output Regulation: 4.75V~5.25V
- 3.3 Output Load Range: 0~3.6A
- 3.4 Output Ripple & Noise: 80mV Max @20MHz BANDWIDTH

4.0 EFFICIENCY: 70% @ FULL LOAD & 120 VAC INPUT

5.0 DIELECTRIC STRENGTH (Hi-Pot) TEST

- 5.1 Finished product withstands AC 3.0KV, for 2 second, 4mA max 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: 9.1V±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:

- (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.

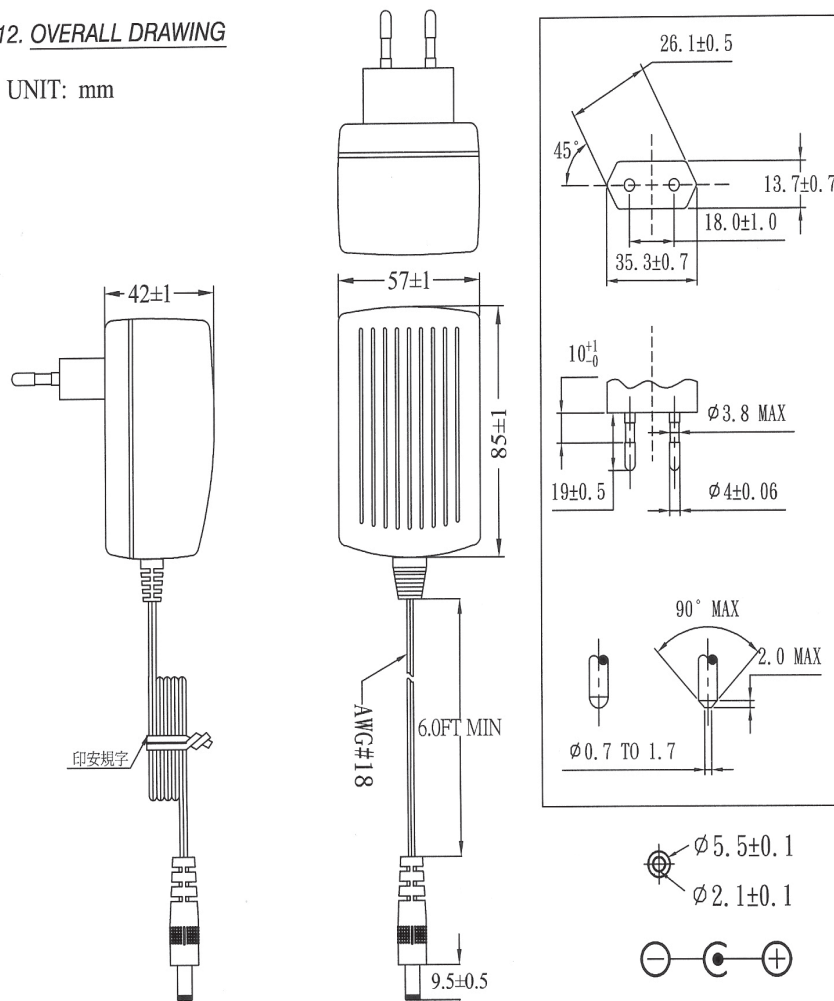
11.0 SAFETY

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

IEC60950: 1999, EN60950: 2000

12. OVERALL DRAWING

UNIT: mm



DATA SHEET

Description: Switching power supply 5V 3,6A

Part-no. SPEED: --

Project-no. SPEED: N-IN20Ha1

Data sheet-no.: DBLKS1357

Index: 0

Date: 21.04.2004

Part-no. customer: --

Project-no. customer: --

Designed:

Checked:

Page:

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M. Hessler

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