## **SPECIFICATION**

# **Desktop Power Adaptor Universal AC Input** 30W 15VDC Output

P/N: A150020HKL

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

This specification (total 6 pages including cover page) in its entirety is approved by:

Company Name **Print Name** 

Specification subject to change without prior notice.



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Date

Signature

#### 1.0 INTRODUCTION

This document specifies a switching power supply with a output of +15V, 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: 0.3W Max

2.4 Input In-rush Current: 50A Max

2.5 Input Current: 0.8A Max

### 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +15V

3.2 Output Regulation: 14.25-15.75V

3.3 Output Load Range: 2.0A

3.4 Output Ripple & Noise: 300mV Max @20MHz bandwidth with

10UF/50V capacitance and 104/50V ceramic capacitor.

4.0 EFFICIENCY: Нь 83.62% @ average of 25/50/75/100% loads 115V&230VAC 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.

#### 0.05%/°C 8.0 TEMPERATURE COEFFICIENT:

## 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.
- 9.3 Finished product withstands AC 1.25KV, for 2 second, 4mA Max primary to gnd

#### 10.0 INSULATION RESISTANCE

Primary to secondary: 50M OHM 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 voltage. 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:  $10\% \sim 95\%$ 

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 J55022(H20)

(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)

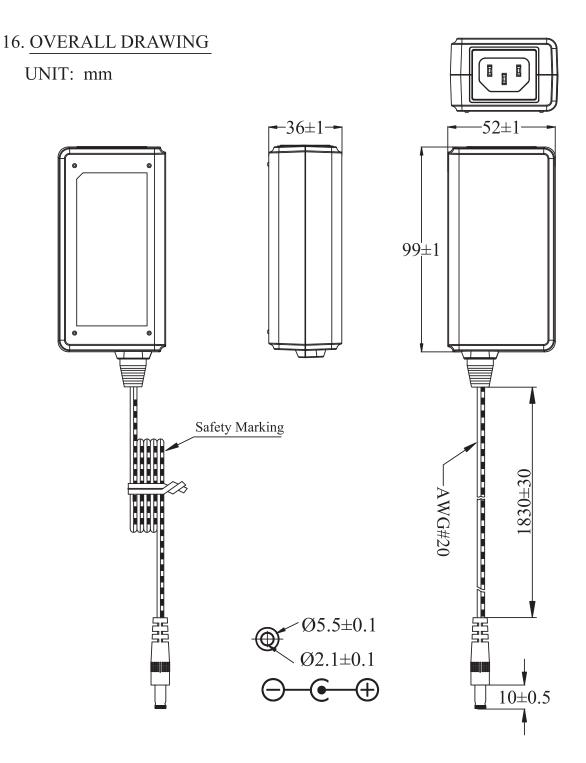
## 14.0 RELIABILITY AND QUALITY CONTROL

#### 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 2nd Edition ,2007-03-27 CSA C22.2 NO.60950-1-07, 2nd Edition.2007-03 EN60950-1: 2006+A11, J60950



\*DC Plug: 2.1 x 5.5 x 10.0mm, center-positive, straight

\*Overmold: Shall not exceed 8.6mm diameter (detailed drawing to be provided)

\*Drawing for reference only

P/N: A150020HKL

Top Microsystems Corp

UNIT: mm

