

## Model: AD-050200-US Series

### 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. 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

2.3 Input In-rush Current: 40A Max

2.4 Input Current: 0.4A Max

### 3.0 OUTPUT REQUIREMENTS

3.1 Output Voltage: +5V

3.2 Output Regulation: 4.7V-5.4V

3.3 Output Load Range: 0-2.0A

3.4 Output Ripple & Noise: 100mV Max @20MHz bandwidth with  
10UF/50V capacitance and 104/50V ceramic capacitor.



4.0 EFFICIENCY:  $\geq 73.37\%$  @ 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.

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: 50M OHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 1.6 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.

