

# SPECIFICATION

**P/N: AHK-I518-A12**

**18W 12VDC 1.5A Output Power  
AC Universal Input**

**High Quality  
Switching Desktop Adaptor**

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

This specification (total 8 pages including drawings) in its entirety is approved by:

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Company Name

Print Name

Signature

Date

**Specification subject to change without prior notice.**



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## CONTENTS

1. INTRODUCTION
2. INPUT REQUIREMENTS
3. OUTPUT REQUIREMENTS
4. EFFICIENCY
5. LINE REGULATION
6. HOLD UP TIME
7. RISE UP TIME
8. TEMPERATURE COEFFICIENT
9. DIELECTRIC STRENGTH (Hi-Pot) TEST
10. INSULATION RESISTANCE
11. PROTECTION
12. ENVIRONMENTAL CONDITIONS
13. EMI/ EMC
14. RELIABILITY AND QUALITY CONTROL
15. SAFETY
16. OVERALL DRAWING
17. PACKING

## 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. 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 : 0.75W MAX

2.3 Input In-rush Current: 50A Max

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: 0~1.5A

3.4 Output Ripple & Noise: 120mV Max @20MHz BANDWIDTH WITH  
22UF/50V CAPACITANCE AND 104/50V CERAMIC CAPACITOR.

4.0 EFFICIENCY:  $\geq 76.01\%$  @ AVERAGE OF 25/50/75/100% LOADS & 115 VAC INPUT

5.0 LINE REGULATION: 2% MAXIMUM

6.0 HOLD UP TIME: 10ms MIN AT 110VAC FULL LOAD.

7.0 RISE UP 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: 50MOHM to 500VDC.

11.0 PROTECTION

11.1 Input Protection

The switching power supply has a 1 amps inner current fuse to protect itself.

11.2 Output Protection

11.2.1 Output Current:

Overload conditions shall decrease the output current. Removal of an output

Overload shall provide automatic recovery for the output voltage.

11.2.2 Short Circuit Protection: Auto Recovery.

## 12.0 ENVIRONMENTAL CONDITIONS

The switching power supply can withstand the following environmental conditions:

12.1 Storage Temperature: -20 °C ~ +70 °C

Relative Humidity: 10 % ~ 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

(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.

### 14.2 MTBF

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

## 15.0 SAFETY

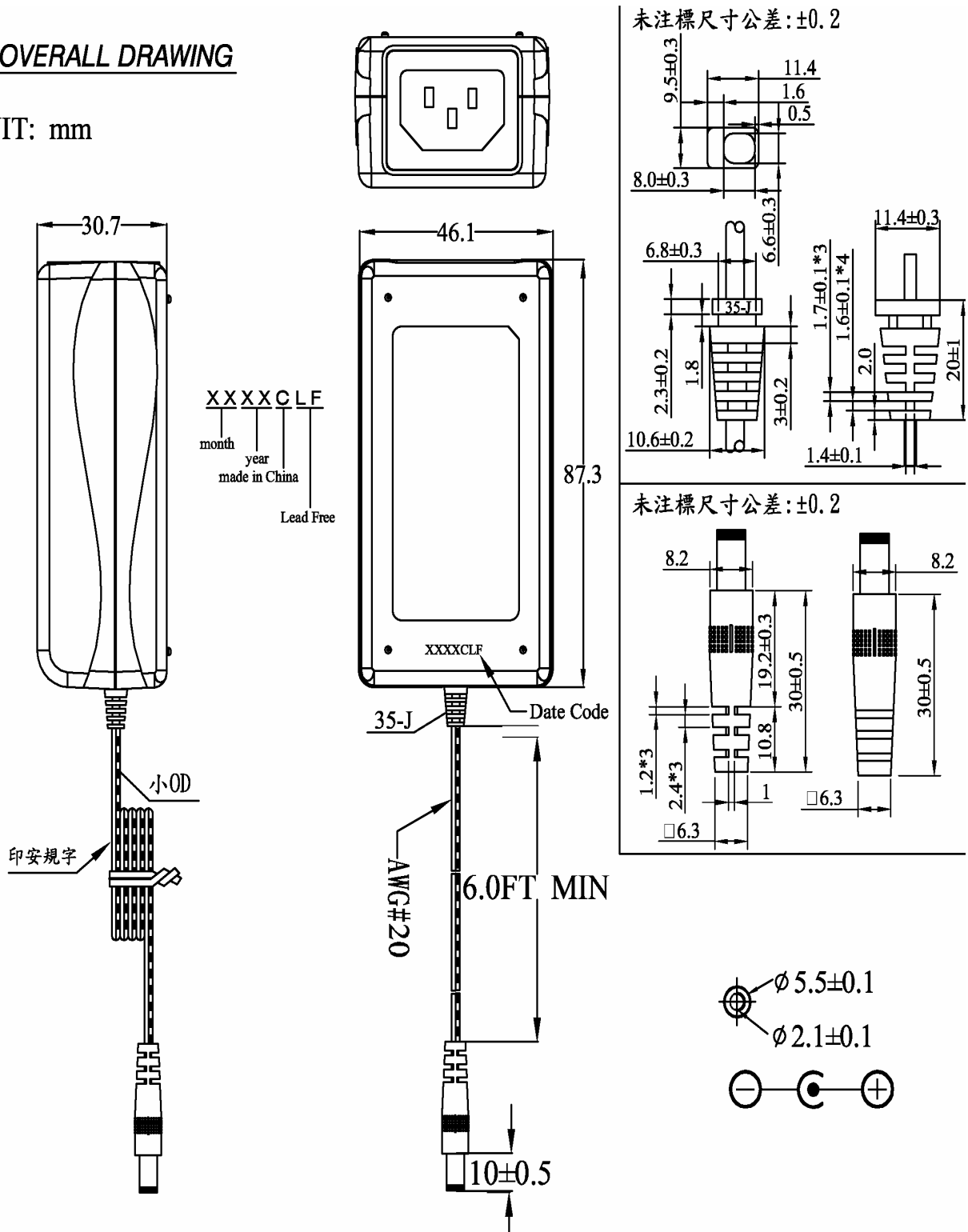
The switching power supply has approved by the following safety standards:

UL60950 (First Edition) CAN/CSA-C22.2 No.950-95

IEC60950: 2001, EN60950: 2001

16. OVERALL DRAWING

UNIT: mm



**17. PACKING**

**17.1 Inner Box**

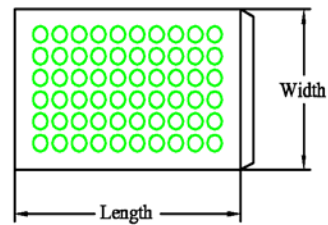
UNIT: mm

Bubble bag may be used for sample only, and not for volumn production.

BUBBLE BAG

Length : 150

Width : 120

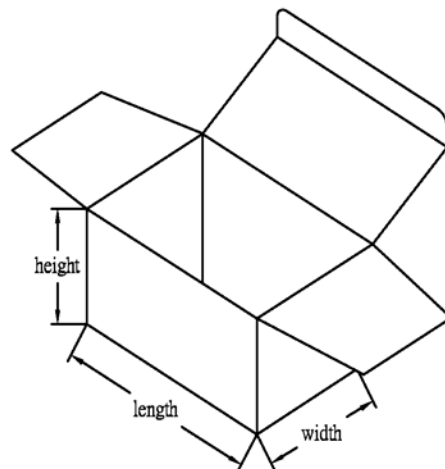


BOX

Length: 95

Width: 60

Height: 55



**NOTICE:**

Boxes used for volumn production may be different from the boxes used for samples.

17.2 Carton

UNIT: mm

