納入仕様書
SPECIFICATION

Customer	:	
Part No.	:	**4050058（ADR-24V1000mA-2.5)**
Design No.	:	MTR-08393
Model No.	:	MPC-2400107
Safety .	:	UL-CUL
Rev	:	E
Date	:	SEP-2-2010

客戸承認合格章 APPROVED BY CUSTOMER

	Specification	AC INPUT：100-240VAC
	Design No:MTR-08393	DC OUTPUT：24V/1A

1.0 SCOPE

1.1 This document describes the electrical, mechanical and environmental specification Wall mount UL type single output 24VDC 1A switching adaptor.

2.0 INPUT SPECIFICATION

2.1 Input Voltage and Frequency

The power supply shall meet all specification below when powered from following sources.

Voltage Range	Line Frequency	Min. Voltage	Max. Voltage
100-240VAC	50~60Hz	90VAC	264VAC

Table 2.1.1

2.2 Current

The maximum input current is 0.65A at 120Vac.

2.3 AC Inrush Current

The peak inrush current shall be limited to 30A at 100Vac input for a cold start at 25℃.

3.0 OUTPUT SPECIFICATION

3.1 Output Voltage (Load regulation)

The power supply shall be statically regulated for load.

Load	Min.Load	Full.Load
Current	0mA	1A
Voltage	22.8VDC~25.2VDC	22.8VDC~25.2VDC

Table 3.1.1

3.2 Line regulation

The line regulation is less than 1%.

3.3 Ripple and Noise

Output 1	Voltage	Max.peak to peak ripple&noise
Vo	24VDC	240mV

Table 3.1.3

Measuring is done by 20MHz bandwidth oscilloscope and terminated each output with a 10uF capacitor and a 0.1uF capacitor.

3.4 Efficiency

The minimum efficiency shall be 80 % typically at 120Vac input and rated load.

3.5 Hold up time

The hold up time shall be longer than 10ms at 120Vac input and rated load.

3.6 Temperature coefficient

±0.05%/°K typical on all output.

3.7 Turn on / off delay

During turn on and turn off, no voltage shall exceed its nominal voltage by more than 10% and no output will change its polarity with respect to its return line. All output shall reach their steady state values within 2S of turn on.

3.8 Transient Response and Deviation

The power supply will meet all specifications and maintain output voltage regulation within 5% of nominal with up to a current change of 50% of maximum current in load for the output #1.

3.9 Indicator

The power supply is designed NO LED indicator to indicate the power output in its normal condition.

4.0 PROTECTION REQUIREMENT

4.1 Over – voltage protection

The power supply shall shutdown all output when output voltage reachs its over – voltage protection trigger point of 31 V.

4.2 Short circuit protection

No damage to the power supply shall be sustained when operating any output under any line condition, into a short circuit condition for an indefinite period of time. The power supply shall be self – recovering when fault condition removed.

4.3 Overshoot

At turn on, the output voltage shall not exceed steady stage by more than 10%.

4.4 Overload Protection (or over current)

The maximum output power shall be limited to 120-210%.

5.0 RELIABILITY

Calculated MTBF shall exceed 35,000 hours at maximum load and 25℃ ambient in accordance with MIL-STD-HDBK-217.

6.0 ENVIRONMENTAL CONDITIONS

6.1 Operating

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

i. Ambient Temperature: 0℃ ～40℃

ii. Relative Humidity: 20% ～ 90%

iii. Altitude : Sea level to -100~10,000 feet.

iv. Vibration: 1.0mm, 10 −25Hz, 15 minutes per cycle for each axis (X, Y, Z)

6.2 Non - operating

The power supply shall be capable of with standing the following environmental conditions extended periods of time, without sustaining electrical or mechanical damage and subsequent operational deficiencies:

6.2.1 Ambient Temperature: -40℃ ~ 70℃

6.2.2 Relative Humidity: 10% ~ 90%

6.2.3 Sea level to -100~10,000 feet

6.2.4 Vibration and Shock:

The power supply shall be designed to with stand normal transportation vibration per MIL–STD-810D, method 514 and procedures X, as it is mounted in the chassis assembly and packed for shipping.

7.0 DIELECTRIC WITHSTAND SPECIFICATION

7.1 Hi-pot test

Shall withstand without breakdown 3000VAC 5mA 1 min between AC plug to DC plug and case. Under leakage current 5mA.

7.2 Insulation Resistance

500 VDC 100 Mega Ohms min. between AC plug to DC plug and case.

8.0 INTERNATIONAL STANDARDS

The power supply has been designed to meet following safety standard

8.1 EMI standards

The power supply meets the radiated and conducted emission requirements for FCC part 15 CLASS B, EN55022 CLASS B.

8.2 EMS standards

The power supply meet below standard

ESD:Contact > 4KV,Air>8KV meet IEC 61000-4-2

RS:Frequency 80MHZ~1.0GHz,Field Strenght 3V/M,meet IEC61000-4-3

EFT:1.0KV on input ac power ports.meet IEC61000-4-4

SURGE: Line to line:+/-1KV(peek),meet IEC61000-4-5

Line to earth(ground):+/-2KV(peek),meet IEC61000-4-5

8.3 Safety

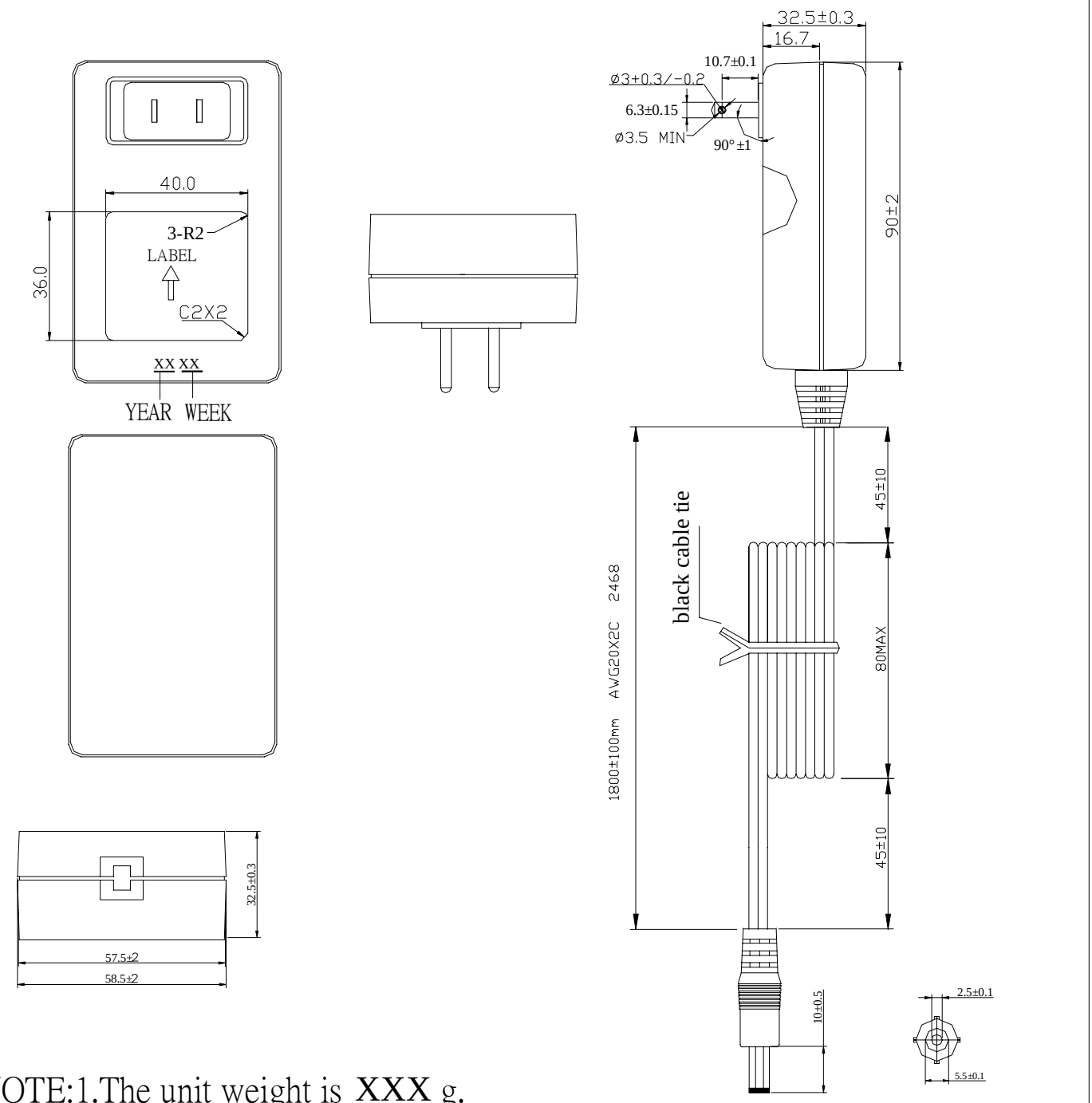
The power supply has been designed to meet or certified under following standard

	Certified	Standard
UL-CUL	APPROVAL	UL 60950-1

9.0 WEIGHT

The unit weight is XXXg. exclude packing.

ATT: 2 EXTERNAL DIMENSION DIAGRAM

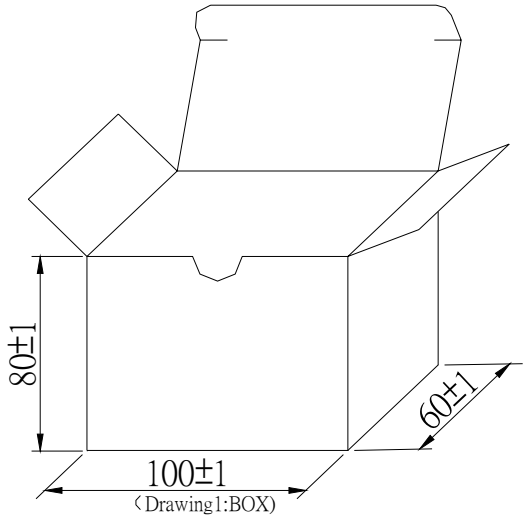


NOTE:1.The unit weight is **XXX** g.
exclude packing.
2.External color is black.

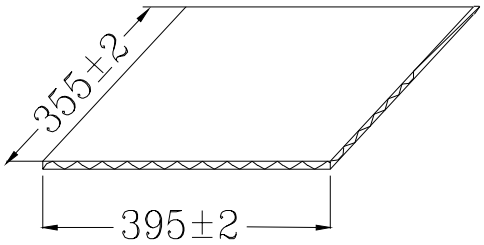
Material		Scale								
Name	Outward dimension	Unit	mm							
Drawn No	MTR-08393			Rev	change date	Change No	Change content	Executed	Check	Approval

Drawn by	Executed by	Check by	Approval by

ATT:3 PACKING DIAGRAM

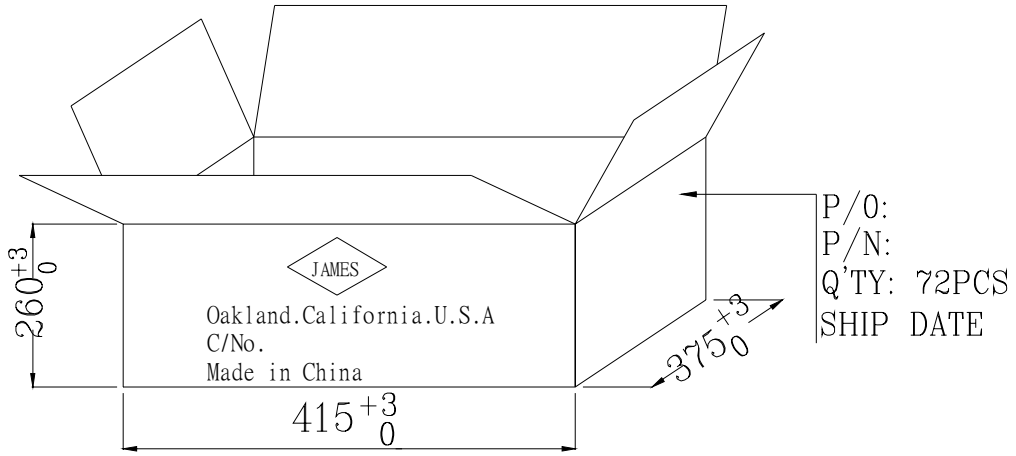


（Drawing1:BOX)



(Drawing2:Separation)

NOTE:
1.Pack with white box 400g.
2.Each layer put 4*6=24pcs,each box put 3layers,total 72pcs.
3.Separation with three layer B/B paper,total 4pcs.
4.PK with five layer B/B paper,PK dimension is within.
exterior WAX defend water .



（Drawing3:PK)

Material		Scale								
Name	Packaging Material	Unit	mm							
Drawn No	MTR-08393									
				Rev	change date	Change No	Change content	Executed	Check	Approval

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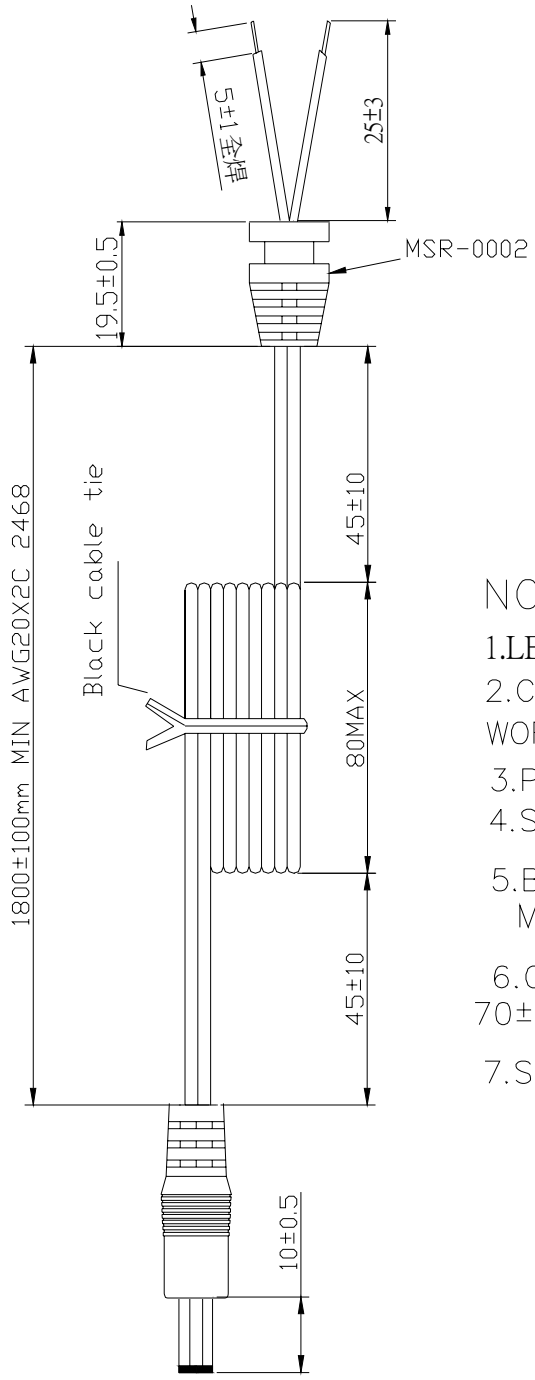
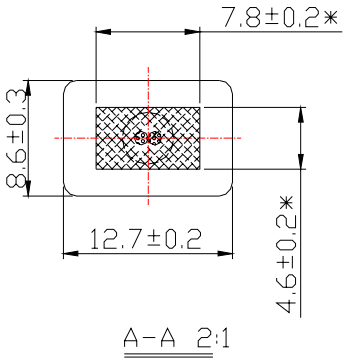
ATT:4 DC CORD DIAGRAM





NOTE:

1.LEAD WIRE UL 20AWGX2C 2468 80℃ ;

2.COLOR: BLACK SIDE"−"AND BLACK WITH WORDS"+";

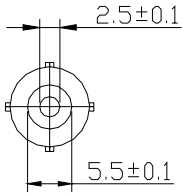
3.POLARITY: ⊖—●—⊕

4.S/R: 20LBS,60SEC;

5.BENDING TEST: 200g,35~40TIMES EACH MIN.120°DEGREE FOR 300TIMES.

6.CORD HARDNESS: WITH DUROMETER TYPE 70±10,

7.SR HARDNESS: 65P.



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