SPECIFICATION

High Quality
Linear Power Adapter

120VAC Input
12VDC 2.5A Output

P/N: L120025RG-US

** Specification Approval**

This specification (total 8 pages including cover page) is approved in it's entirety by:

Company Name	Print Name	Signature	Date

3261 Keller St.
Santa Clara CA 95054
Tel: 1-408-980-9813
Fax: 1-408-980-8626
Email: infor@topmicro.com
Web: www.topmicro.com

1. Appearance:

1.1 Surface: damage and rust are not permitted.

1.2 Terminal

Terminal No.	1.	2.	3.	4.
Color	Silver-White		Black	
Length(mm)	17mm		1830mm	
Tolerance	±1.0 mm		+100/-0mm	
Connector	UL Standard Plug		UL SPT-1 AWG 18	

1.3 Cord pull test: 2 kg for 10 seconds.

1.4 Impregnation: Varnish

2. Electrical Characteristics:

2.1 Primary rated voltage and frequency: 120 VAC 60 Hz.(1) -(2)

2.2 Secondary rated voltage regulation:

Input Rated Voltage	Rated Voltage	Rated Current	Ripple Voltage(Vp-p)	No Load Voltage
120V AC	DC 12V ±5%	DC 2500 mA	———————	DC 16.5V ±5%

2.3 (1) Exciting Current: Input Primary 120 VAC 60 Hz 120 mA max.
(2) Input load current: Input Primary 120 VAC 60 Hz 400 ±20% mA .

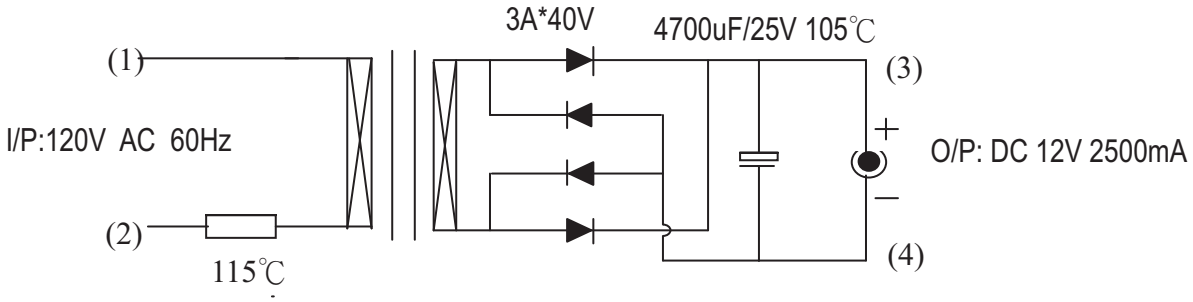
2.4 HI-POT test: (1) Input 50Hz 1500 VAC for one minute or 1800 VAC for one second between Primary V.S. Secondary and Primary V.S. Core (2) 500 V AC for one minute or 800 V AC for one second to secondary V.S. core. Cut off current 1 mA.

2.5 Insulation test: 500V DC 100M ohm Min between primary V.S. secondary and pri/sec V.S. core

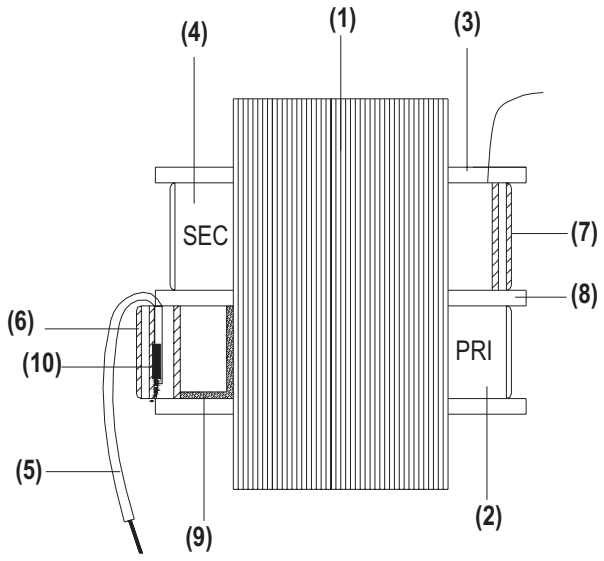
2.6 Environmental test: Temp. 32±2℃; relative humidity 90% for 2-4 hours. After keeping 30 minutes following insulation resistance must be larger than 5 MΩ.

3. Reference Standard: UL&CUL 1950

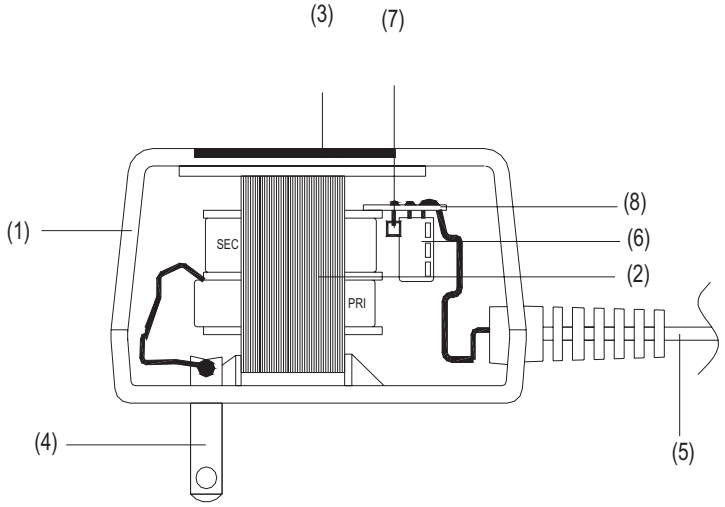
4. Circuit Diagram



ITEM	MATERIAL	MATERIAL DESCRIPTION	STANDARD
1	Core	E-I-57 Silicon Steel	
2	Wire of Primary Winding	UEW Polyurethane Enamelled Copper Wire	OBMW2
3	Bobbin	Nylon 66 "Leona"1300S or Nylon Zytel 101L	QMFZ2
4	Wire of Secondary Winding	UEW Polyurethane Enamelled Copper Wire	OBMW2
5	Input Lead Cable	UL 1015 AWG# 22	AVLV2
6	Pri Out Wrapping Tape	0.025mm Polyester Tape/7 Turns.	OANZ2
7	Sec Out Wrapping Tape	0.025mm Polyester Tape/3 Turns.	OANZ2
8	Insulator	0.8mm Min Thick/Bobbin Flange.	QMFZ2
9	Insulation Layer	0.15mm *2 Acetate Cloth Tape	OANZ2
10	Thermal Fuse	M20/L20 115℃ 1A	XCMQ2
		A2 115℃ 1A	
		RH115 115℃ 1A	

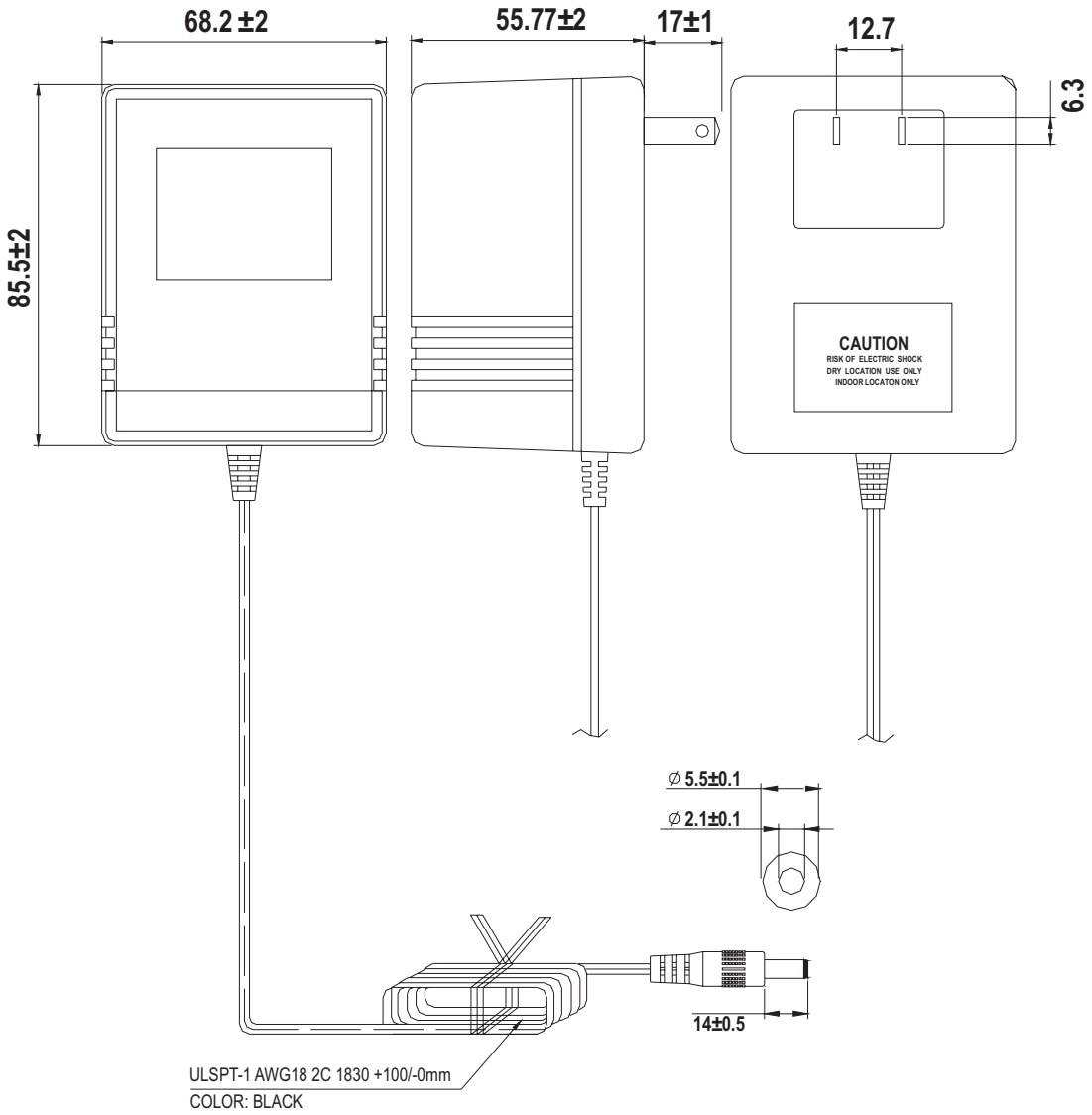


ITEM	MATERIAL	MATERIAL DESCRIPTION
1	Case	EI-57 Type 94V-1 For RoHS
2	Transformer	Type: Coil & Core (EI-57) For RoHS
3	Label	CPC or PET For RoHS
4	Input Plug	UL Standard Plug For RoHS
5	Output Cord	UL SPT-1 AWG#18 2C Color: Black/White For RoHS
6	Electrical Capacitor	4700uF/25V 105℃ For RoHS
7	Diode	3A*40VMin* 4PCS For RoHS
8	P.C. Board	UL94V-0 For RoHS



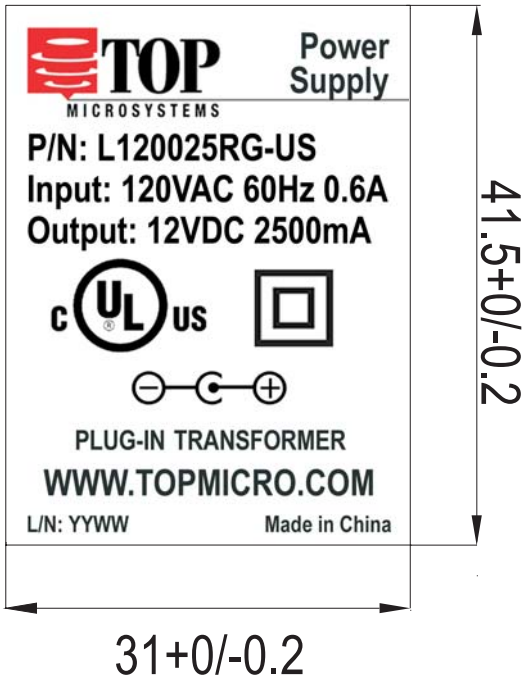
5. Mechanical Drawing

Unit:mm

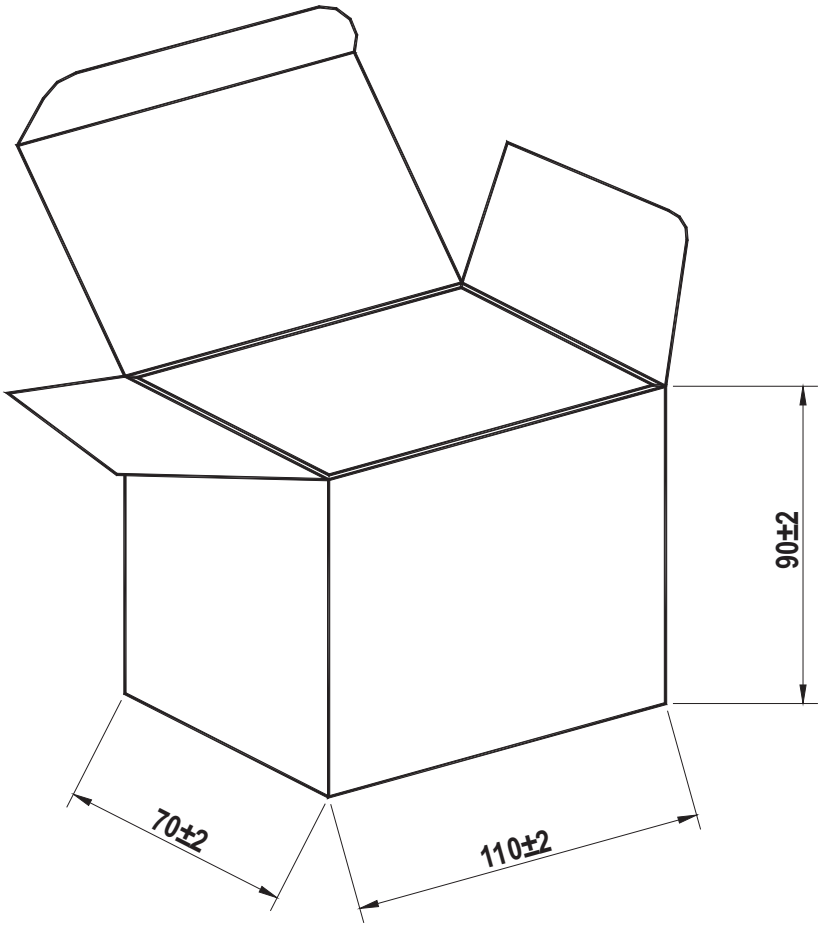


6. Label

Unit:mm



7. Internal Packing



BOX SIZE: 110(L)*70(W)*90(H)

COLOR: WHITE

8. Test Report

TEST ITEM	SPECIFICATION	1									
PRI/VOLTAGE	AC 120 V / 60 Hz	120									
EXCITNG CURRENT	AC 120 mA Max	72									
RATED CURRENT	AC 400 ±20% Ma	408									
SEC.N/L VOLTAGE	DC 16.5V±5%	16.50									
SEC.N/L VOLTAGE											
SEC.F/L VOLTAGE	DC 12V ±5%	12.05									
SEC.F/L VOLTAGE											
SEC.RATED CURRENT	DC 2500 mA	2500									
RIPPLE VOLTAGE											
HI-POT P-S,P-C / S-C	AC 2000 V / 1000V 1mA (1Sec)	OK									
DROP TEST	30 cm for 6 times	OK									
CORD TEST	2 kg PULL for 10 seconds.	OK									
INSULATION TEST	DC 500V 100M Ω Min	OK									