

SPECIFICATION

Switching Wallmount Adapter Efficiency Level VI

**Universal AC Input
6W 5.0VDC 1.2A Output**

P/N: W050012Y1-US

****Specification Approval****

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

Company Name	Print Name	Signature	Date
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Specification subject to change without prior notice unless an agreement is in place.



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1. Scope

The document detail the electrical, mechanical and environmental specifications of a switching power supply providing 6W continuous output power and meeting ROHS requirements.

2. Input

2.1. Input Voltage & Frequency

The range of input voltage is from 90Vac to 264Vac single phase.

	Minimum	Nominal	Maximum
Input Voltage	90Vac	100Vac~240Vac	264Vac
Input Frequency	47Hz	60Hz/50Hz	63Hz

2.2. Input AC Current

0.25A max. @ 100-240Vac input, full load

2.3. Inrush Current

40A max. @ 264Vac input (cold start)

2.4. Average Efficiency

73.62% min.

2.5. Energy Consumption

<0.1W @ 100-240V input

3. Output

3.1. Static Output Characteristics

Output Volts	Rated Load		Output Range	Ripple Noise
	Min. Load	Max. Load		
+5V	0.0A	1.2A	4.75V ~5.25V	200mVp-p

Ripple & Noise: measurement is by 20MHz bandwidth oscilloscope and output paralleled with a 0.1uF ceramic capacitor and 10uF electrolysis capacitor.

3.2. Line & Load Regulation

Output Rate	Load Condition		Line Regulation	Load Regulation
	Min. Load	Max. Load		
+5V	0.0A	1.2A	1%	5%

3.3. Turn-on Delay

3seconds max. @ 100Vac to 240Vac input & full load

3.4. Hold-up Time

10mS min. @ full load & 115Vac/60Hz input

20mS min. @ full load & 230Vac/50Hz input

3.5. Rise Time

20mS max. @ rated load

3.6. Fall Time

20mS max. @ full load

3.7. Output Overshoot / Undershoot

10% max. when the power on or off

3.8. Output Load Transient Response

Output voltage within 4.75V ~5.25V for load step from 25% to 50% to 25%,50% to 75% to 50% R/S: 0.25A/uS, Transient Response Recovery Time 200uS, Dynamic response overshoot 5%

4. Protection

4.1. Over Current Protection

Over Current Point Limited at <1.5A (100-240V)

The output shall hiccup when the over currents applied to the output rail, and shall be self-recovery when the fault condition is removed.

4.2. Short Circuit Protection

The input power shall decrease when the output rail short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed.

5. Environment

5.1. Operating Temperature and Humidity

0°C to +40°C

10%RH to 90%RH

5.2. Storage Temperature and Humidity

-20°C to +80°C

5%RH to 95%RH non-condensing

5.3. Vibration

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z

5.4. Drop Test

Height: 1m; the product shall be dropped onto a hardwood floor with a thickness of 20mm and cement base. Adapter shall be dropped two times on each surface.

6. Reliability

6.1. Burn-in

The power supply shall be burn-in for 2 Hours under normal input and 80% rated load at 40°C 5°C

7. EMI/EMS Standards

7.1. EMI Standards

FCC Part15 class B

7.2. EMS Standards

Electrostatic Discharge (ESD)

Discharge Characteristic	Test Level	Test Criteria
Air discharge	+/-8KV	B
Contact discharge	+/-4KV	

Radiated Electromagnetic Field Susceptibility (RS)

Test Level	Test Criteria
3V/m(R.M.S.)	A
80-1000MHz, 80%AM (1KHz) sine-wave	

Electric Fast Transients (Burst) Immunity

Coupling	Test Level	Test Criteria
AC input	0.5KV	A
AC input	1KV	B

Surge Capability Requirements

Surge Voltage	Test Criteria
Common mode +/-2KV	A
Differential mode +/-1KV	

Induced Radio Frequency Fields Conducted Disturbances Immunity

Test Level	Test Criteria
3V	A
0.15-80MHz, 80%AM (1KHz)	

8. Safety

8.1. Dielectric Strength(Hi-pot)

Primary to Secondary: 3000Vac / 10mA Max / 60 second

Primary to Secondary: 3300Vac / 5mA Max / 3S

8.2. Leakage Current

0.25mA max. at 264Vac / 50Hz

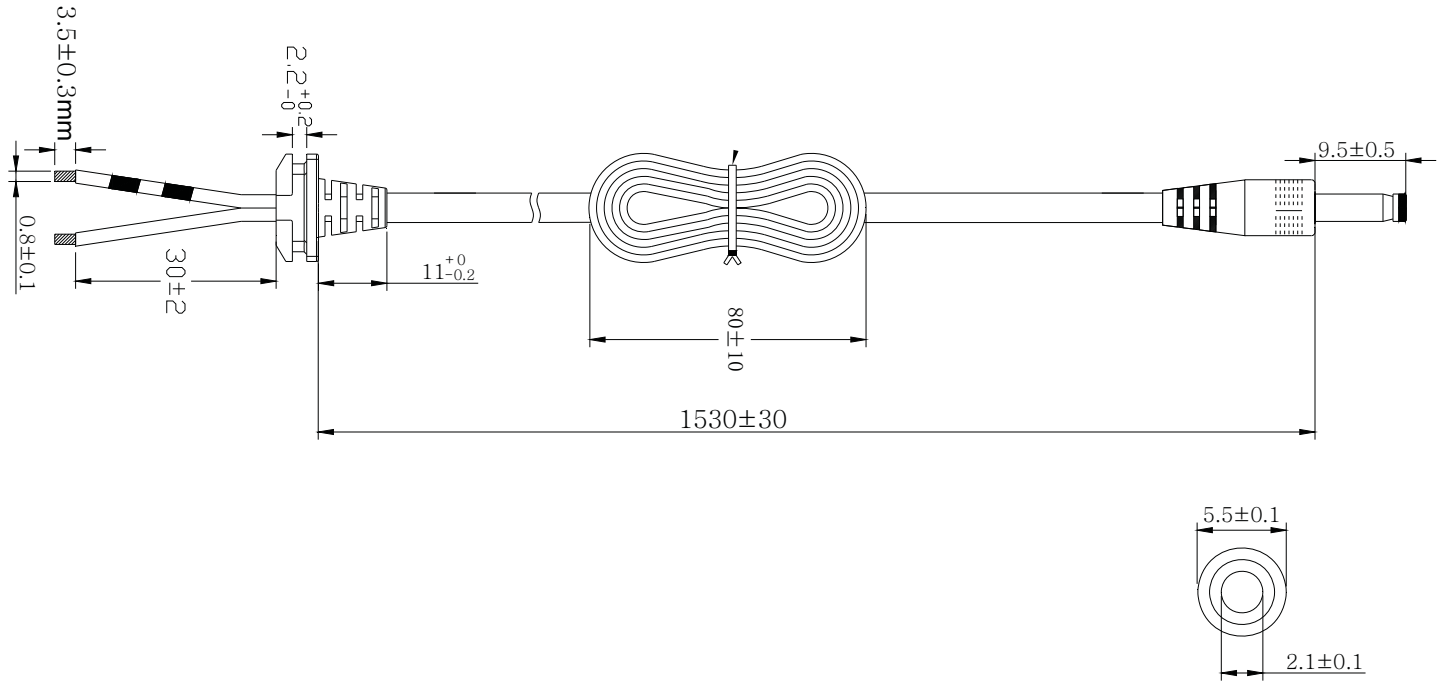
8.3. Insulation Resistance

50M Ω min. at primary to secondary add 500Vdc test voltage

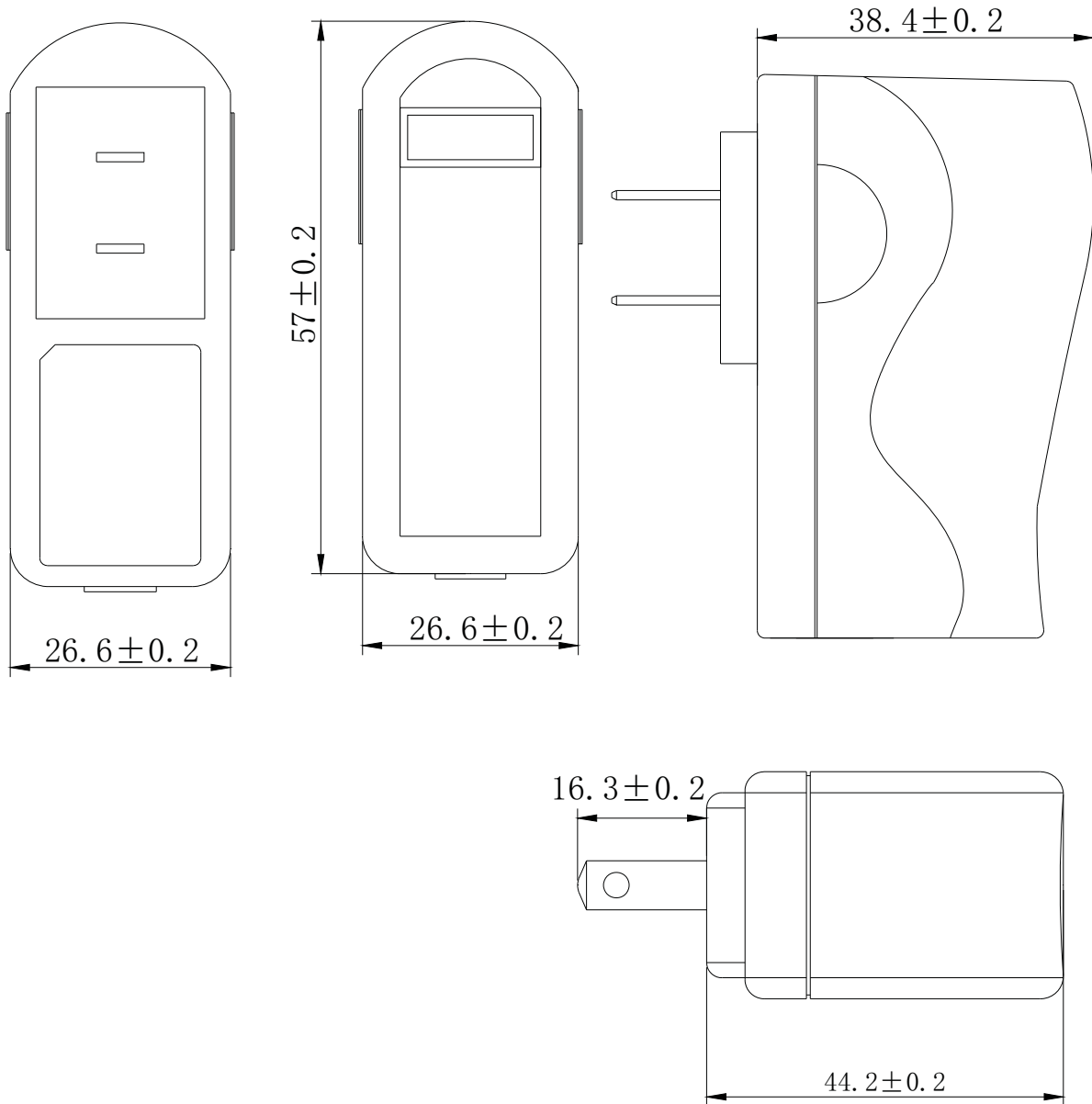
8.4. Regulatory Standards

Type	Country	Standard
UL/FCC	USA	UL60950

9. Cable & Connector Drawing



10. Mechanical Drawing



11. Rating Label

