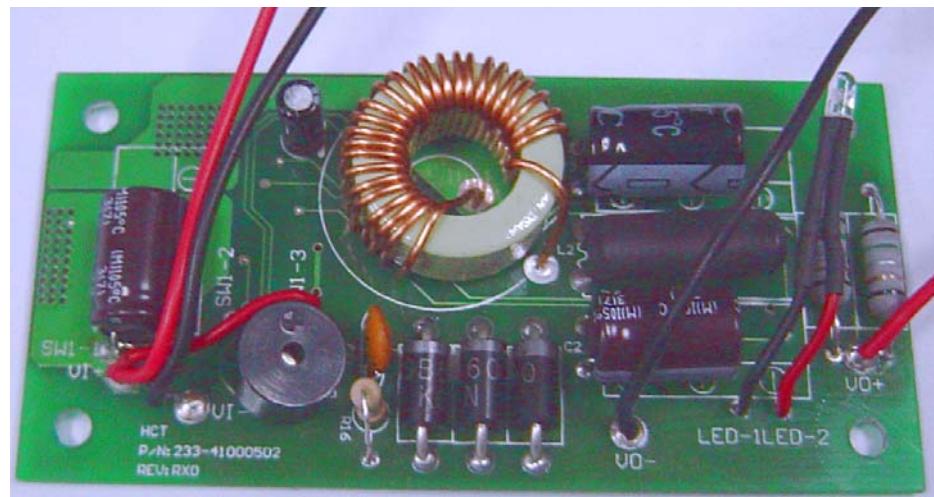


AA Portable Power Corp.

SPECIFICATION

DC-DC regulator;12V-16.8VDC to 12V-13.2VDC



<http://www.batteryspace.com>

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Revision History

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1.0 INPUT

1.1 Voltage

Minimum	Normal	Maximum	Unit
12.0	14.8	16.8	Vdc

1.2 Low voltage alarm

The buzzer will alarm when the input voltage is less than 12.6V.

1.3 Efficiency

88%(min.) at full load,

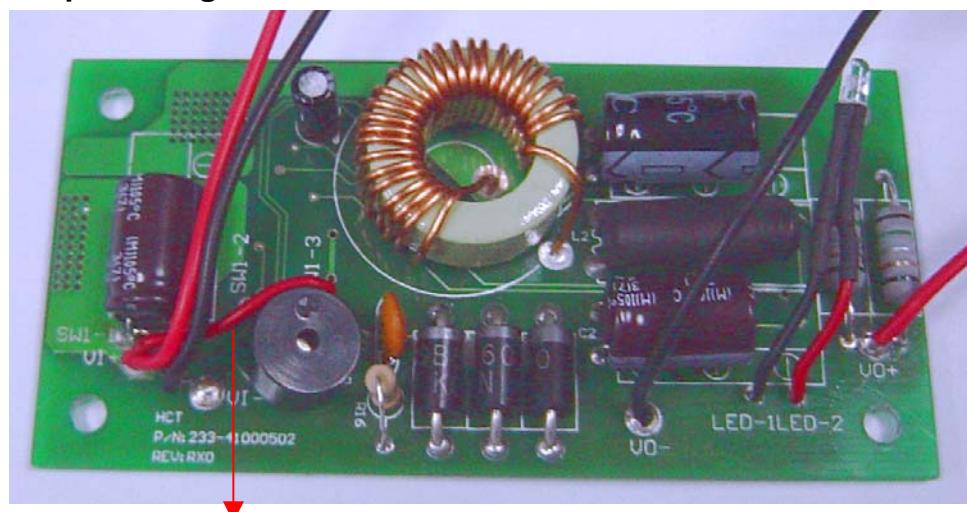
2.0 OUTPUT

Output voltage1:12.0V



Connect SW1-1 to SW1-2, output voltage is 12.0V

Output voltage2:13.2V



Connect SW1-1 to SW1-3, output voltage is 13.2V

Output voltage3:0V

If SW1-2 and SW1-3 float, output voltage is 0V,dissipation current is less than 50uA.

Voltage	+12.0V	+13.2V
Max. load	4.0A	4.0A
Min load	0A	0A
Regulation	+/-5%	+/-5%
Ripple & Noise	200mVp-p	200mVp-p

NOTE:

- . A 0.1uF ceramic and 10uF tantalum capacitors should be put across output terminals during ripple & noise test. The scilloscope bandwidth is set at 20MHz and co-axial probe will be used to measure it. The test condition is max. load and normally line.

2.1 Load transient response (Step load)

Step load changes of 40% to 80% of full load. The load wave form shall be a square wave with the slope of the rise and fall at 0.1A/uS. the DC output voltages will stay within regulation. Recovery time 500us max. during the step load changes.

3.0 PROTECTION

3.1 Over voltage protection

Output over voltage protection with zener diode.

3.2 Short circuit protection

The output short to ground, it will auto-recovery without damage.

4.0 ENVIRONMENT:

4.1 Ambient operation temperature

0°C to +40°C

4.2 Ambient operation relative humidity

20% to 85%

4.3 Ambient storage temperature

-40°C to +70°C

4.4 Ambient storage relative humidity

10% to 95%

5.0 VIBRATION TEST

6.1 Vibration frequency:5-60-5Hz with 10 octave/min@2.1G

6.2 Three circles per axis(X,Y,Z) for 10minutes

6.0 MTBF

40,000 hours base on bellcore TR332 document required at 25°C.

7.0 Outline

8.1. Outline dimension:L*W*H=100*50*20mm(max);