

# **AA Portable Power Corp.**

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## **SPECIFICATION FOR DC- DC Regulator Module 6.0V-8.4VDC(1 Amp Max) to 5VDC ( 1Amp Max)**



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## Revision History

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A0	Original	Mar - 20 - 2007

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## **1.0 INPUT**

### **1.1 Voltage**

Minimum	Normal	Maximum	Unit
6.0	7.4	8.4	Vrms

### **1.2 Current**

**1.0A.(MAX)**

### **1.5 Efficiency**

**85(min.) at full load,**

## **2.0 OUTPUT**

<b>Voltage</b>	<b>+5.0V</b>
<b>Max. load</b>	<b>1.0A</b>
<b>Min load</b>	<b>0A</b>
<b>Regulation</b>	<b>+/-5%</b>
<b>Ripple &amp; Noise</b>	<b>100mVp-p</b>

#### **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.**

**And the frequency shall be from 10Hz to 1KHz. 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:65.0x18.0x10.0mm.**