

AA Portable Power Corp.

SPECIFICATION FOR DC- DC Regulator;(6V-8.4VDC to 6VDC)



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Revision History

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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

Voltage	+6.0V
Max. load	1.0A
Min load	0A
Regulation	+/-5%
Ripple & Noise	100mVp-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.

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.