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1.0 INTRODUCTIONS:

1.1 This document specifies the product model number SSA-0601D-12 a 60 watt adaptor single output switching mode power supply, this unit is designed to meet the relevant specification and regulation as following.

The specification is typical at nominal line and 25°C ambient.

1.2 Compliant with CEC Level V and EPA Energy Efficiency Level V requirements.

1.3 This product is complied with RoHS request for 6 hazarded substances.

2.0 AC INPUT CHARACTERISTICS:

- 2.1 Input Voltage rating: 100Vac to 240Vac.
- 2.2 Input Voltage range: 90Vac to 264Vac.
- 2.3 Input Frequency: 47 Hz to 63 Hz.
- 2.4 AC Inrush current (max.): 85A max. for 230Vac at max.load(cold start)
- 2.5 Input current: 1.5A max. for 110~240Vac at max. load.
- 2.6 Leakage current: 3.5mA max at 240Vac 50Hz.
- 2.7 No load power consumption: < 0.3W at 115Vac/60Hz or 230Vac/50HZ

3.0 DC OUTPUT CHARACTERISTICS:


3.1 Output specifications table:

Output Voltage	Minimum Load	Maximum Load	Load Regulation	Ripple & Noise
V1: <u>+12V</u>	<u>0A</u>	<u>5</u> A	<u>±3%</u>	<u>120mVp-p</u>

3.2 Line regulation: The line regulation is less than +/-1% while measuring at max. load and +/-10% of input voltage change.

3.3 Output Dynamic Response: +/-8% Max, Excursion for output load 20% to 100% max. load. changes with a 0.1~2.5A/us slew-rate And 1ms / 10ms /20ms.

3.4 Ripple & noise: 120mV at max. load, nominal line. Measuring is done by 20 MHz bandwidth oscilloscope and dc output with a 10uF electrolytic cap parallel 0.1 uF ceramic capacitor.

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4.0 GENERAL SPECIFICATION:

- 4.1 Efficiency: 87% (Average) at 25%, 50%, 75%, 100% load;
at 115Vac/60Hz or 230Vac/50HZ,25°C.
- 4.2 Hold up time: Minimum 12mS at max load ; 115Vac/60Hz,25°C.
- 4.3 Turn-ON delay Time: 2 Sec max; 90Vac with Full Load
- 4.4 Rise time: 30mS typical at max. load ; 90Vac~264Vac/,25°C
- 4.5 Overshoot: Any overshoot at turn on or turn off shall be less than 10% of the nominal output voltage.
- 4.6 MTBF: MIL-HDBK-217F 80,000 hours at max. load ;
115V/60HZ & 230V/50HZ, 25°C.

5.0 PROTECTION:

- 5.1 Over voltage protection: +12VDC : 16VDC Max can be protected at No-Load.(only external test)
- 5.2 Short circuit protection: Output can be shorted without damage, auto recovery
- 5.3 Over current protection: 160% max with shut-down and auto recovery. (recovers automatically after fault condition is removed.)
- 5.4 Over & undershooting: $\pm 10\%$ of DC output.

6.0 Dielectric Withstand Voltage:


- 6.1 primary to secondary: 3000Vdc 1mA for 1 Sec.
- 6.2 primary to ground: 1500Vac 10mA for 1 Sec.

7.0 SAFETY STANDARD:

- Designed to meet: UL60950-1 2nd
CSA 22.2 NO.60950-1 (CUL).
TUV EN60950-1.
CB Certificate and report.
CCC
PSE

8.0 EMI STANDARD (Conducted & Radiation):

- Designed to meet: FCC class B.
CE (CISPR 22 class B).
C-tick,KC,BSMI


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9.0 EMS STANDARD:

Designed to meet:	EN55022: 2006 Class B.
	EN61000-3-2: 2006 Class D.
	EN61000-3-3: 1995+A1: 2001+A2: 2005.
	EN55024: (1998)+A1: 2001+A2: 2003
	IEC 61000-4-2:2001 B.
	IEC 61000-4-3:2006 A.
	IEC 61000-4-4:2004 B.
	IEC 61000-4-5:2005 B.
	IEC 61000-4-6:2006 A.
	IEC 61000-4-8:2001 A.
	IEC 61000-4-11:2004

10.0 ENVIRONMENTAL:

10.1 Temperature:	<u>0°C to 40°C</u> (operating). <u>-25°C to 75°C</u> (storage).
10.2 Temperature coefficient:	<u>0.04%</u> per °C.
10.3 Relative humidity:	Non-condensing <u>10%</u> to <u>85%</u> (operating). Non-condensing <u>0%</u> to <u>90%</u> (storage).
10.4 Vibration:	Non-operating: <u>5~500Hz, Acceleration:1G</u> . Sweep rate: <u>1 oct/min</u> . Axis: X, Y, Z (10 minutes for each axis).

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11.0 Mechanical Specifications :

