



SWITCHING POWER SUPPLY


PRODUCT SPECIFICATIONModel: SSA-1201-12 Rev.: A2
+12V 8.5A

File: EA-A1201-12

Date: Sep. 7, 2010

Page: 1 of 5

1.0 Introductions :	2
2.0 Input Characteristics:	2
2.1 Input Voltage Rating:.	2
2.2 Input Voltage Range:	2
2.3 Input Frequency:	2
2.4 Inrush current:	2
2.5 Input current:	2
2.6 Leakage current:	2
2.7 Power Factor:	2
2.8 No load power consumption:	2
3.0 Output Characteristics :	2
3.1 Output specifications table:	2
3.2 Line regulation:	2
3.3 Output Dynamic Response:	2
3.4 Ripple & noise:	2
4.0 GENERAL SPECIFICATION:	3
4.1 Efficiency:	3
4.2 Hold up time:	3
4.3 Turn-ON delay Time:	3
4.4 Rise time:	3
4.5 Overshoot:	3
4.6 MTBF:	3
5.0 PROTECTION:	3
5.1 Over voltage protection:	3
5.2 Short circuit protection:	3
5.3 Over current protection:	3
5.4 Over power protection:	3
5.5 Over thermal protection:	3
5.6 Over & undershooting:	3
6.0 Dielectric Withstand Voltage:	3
6.1 primary to secondary :	3
6.2 primary to ground:	3
7.0 SAFETY STANDARD:	3
8.0 EMI STANDARD (Conducted & Radiation):	3
9.0 EMS STANDARD:	4
10.0 ENVIRONMENTAL:	4
11.0 Mechanical Specifications :	5

 SWITCHING POWER SUPPLY	PRODUCT SPECIFICATION	File: EA-A1201-12
	Model: SSA-1201-12 Rev.: A2 +12V 8.5A	Date: Sep. 7, 2010 Page: 2 of 5

1.0 INTRODUCTIONS:

1.1 This document specifies the product model number [SSA-1201-12](#) a [102W](#) 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 IV and EPA Energy Efficiency Level V requirements.

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

2.0 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 Inrush current: [It shall be limited to a level below the I²t of the fuse and the bridge diode.](#)
- 2.5 Input current: [2A](#) max. for 110~240Vac at max. load.
- 2.6 Leakage current: [3.5mA](#) max at 240Vac 50Hz.
- 2.7 Power Factor: The power factor should be over 0.9 at 110~240Vac at max. load.
- 2.8 No load power consumption: < [0.5W](#) at 115Vac/60Hz or 230Vac/50HZ

3.0 OUTPUT CHARACTERISTICS:


3.1 Output specifications table:

Input oltage	Out Voltage	Minimum Load	Maximum Load	Regulation	Ripple & Noise
90VAC	12	0 A	8 A	±5%	120mVp-p
100VAC	12	0 A	8.5A	±5%	120mVp-p
264VAC	12	0 A	8.5A	±5%	120mVp-p

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: [+/-10%](#) 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. ([140mV](#) max @ 0°C).

 SWITCHING POWER SUPPLY	PRODUCT SPECIFICATION	File: EA-A1201-12
	Model: SSA-1201-12 Rev.: A2 +12V 8.5A	Date: Sep. 7, 2010
		Page: 3 of 5

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 [8](#)mS at max load ; 115Vac/60Hz,25°C.
- 4.3 Turn-ON delay Time: [2](#) Sec max; 90Vac with Full Load
- 4.4 Rise time: [50](#)mS 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: [+12V](#) : 16V Max can be protected at No-Load.
- 5.2 Short circuit protection: Output can be shorted without damage, latch off
- 5.3 Over current protection: 150% max with shut-down and latch off
- 5.4 Over power protection: 150% max with shut-down and latch off
- 5.5 Over thermal protection: With shut-down and latch off protection.
- 5.6 Over & undershooting: $\pm 10\%$ of DC output.


6.0 Dielectric Withstand Voltage:

- 6.1 primary to secondary: [3000](#)Vdc [10](#)mA for 1 Sec.
- 6.2 primary to ground: [1772](#)Vac [10](#)mA for 1 Sec.

7.0 SAFETY STANDARD:

Designed to meet:

(cTUVus) UL 60950-1 2007
 CSA/CAN C22.2 NO. 60950-1: 2007
 (CB) IEC 60950-1:2005
 (TUV) EN60950-1/A11:2009
 CCC
 PSE

 SWITCHING POWER SUPPLY	PRODUCT SPECIFICATION	File: EA-A1201-12
	Model: SSA-1201-12 Rev.: A2 +12V 8.5A	Date: Sep. 7, 2010 Page: 4 of 5

8.0 EMI STANDARD (Conducted & Radiation):

Designed to meet:

(CE) EN55022: 2006 CLASS B
 EN55024:1998/A1: 2001/A2: 2003 ;
 EN 61000-3-3:1995/A1:2001/A2:2005
 EN 61000-3-2:2006 CLASS D
 (FCC) FCC Part 15 & Part 2 (CISPR 22 CLASS B)
 (C-TICK) AS/NZS CISPR 22:2006 CLASS B

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: [0°C](#) to [40°C](#) (operating).
[-25°C](#) to [75°C](#) (storage).

10.2 Temperature coefficient: [0.04%](#) per °C.

10.3 Relative humidity: Non-condensing [10%](#) to [85%](#) (operating).
 Non-condensing [0%](#) to [90%](#) (storage).

10.4 Vibration: Non-operating: [5~500Hz, Acceleration: 1G](#),
 Sweep rate: [1 oct/min.](#)
 Axis: X, Y, Z (10 minutes for each axis).

11.0 Mechanical Specifications : 174(L) x 65(W) x 37(H) mm

