文號:SP- 430012

規格書
SPECIFICATION

品名 STYLE NAME：	SWITCHING POWER SUPPLY
型號 MODEL NO.：	BP1H-6300F
料號 PART NO.：	
版次 REVISION：	A2

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Revision

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A2	4 4	1.0 2.0	2005/2/24	Update Update

MODEL NO. BP1H-6300F

1.0 Scope

This specification defines the performance characteristics of a grounded, 300 watts, 6 output level power supply. This specification also defines world wide safety requirements and manufactures process test requirements.

2.0 Input requirements

2.1 Voltage

Range 20VDC to 36VDC
Normal 24VDC

2.2 Input current

20A at 24VDC input

2.3 Inrush current

Less than 10A.

3.0 Output requirements

3.1 DC load requirements

Normal Output voltage	Load current Max.	Load current Min	Regulation tolerance Max.	Regulation tolerance Min.
+5V	35	1	+5%	-5%
+12V	22	1	+5%	-5%
-5V	0.5	0.1	+10%	-10%
-12V	0.5	0.1	+5%	-5%
+3.3V	20	1.0	+5%	-5%
+5Vsb	2	0.1	+5%	-5%

+5V and +3.3V total output max : 40A

3.2 Regulation

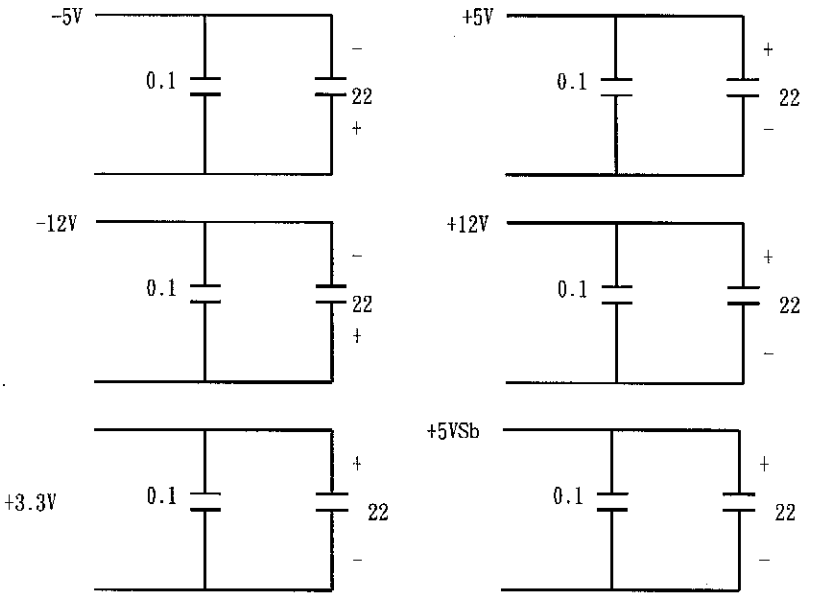
Output DC voltage	Line regulation
+5V	±1%
-5V	±2%
+12V	±1%
-12V	±1%
+3.3V	±1%
+5Vsb	±1%

3.3 Ripple and noise

3.3.1 Specification

+5V	50mV (P-P)
+12V	120mV (P-P)
-5V	120mV (P-P)
-12V	150mV (P-P)
+3.3V	50mV (P-P)
+5Vsb	50mV (P-P)

3.3.2 Ripple voltage test circuit



0.1uf is ceramic the other is tantalum.
Noise bandwidth is from DC to 20MHZ.

3.4 Overshoot

Any overshoot at turn on or turn off shall be less 15% of the nominal voltage value, all output shall be within the regulation limit of section 3.2 before issuing the power good signal of section 6.0.

3.5 Efficiency

Power supply efficiency typical 65% at DC 24V input, full load. Output power condition.

3.6 Remote on/off control

The power supply DC outputs (with the exception of +5VSB) shall be enabled with an active-low, TTL-compatible signal ("PS-ON")
When PS-ON is pulled to TTL low, the dc outputs are to be enabled.
When PS-ON is pulled to TTL high or open circuited, the DC outputs are to be disabled.
The DC output enable circuit shall be SELV compliant.

4.0 Protection

4.1 Input (primary)
The input power line must have an over power protection device in accordance with safety requirement of section 8.0

4.2 Output (secondary)

4.2.1 Over power protection
Over power protection at 110%~150% of rated output power. The power supply latches all DC output into a shutdown state. Over power of this type shall cause no damage to power supply, after over load is removed and a power on/off cycle is initiated, the power supply will restart.

4.2.2 Over voltage protection
If an over voltage fault occurs (internal of the power supply), the power supply will latch all DC output into a shutdown state before

+5V	5.5V	~	6.5V
+12V	13.0V	~	15.0V
+3.3V	3.9V	~	5.0V

4.2.3 A: A short circuit placed on any DC output to DC return shall cause no damage.
B: The power supply shall be latched in case any short circuit is taken place at +5V, +3.3V, +12V output.
C: The power supply shall be auto-recovered in case any short circuit is taken place at -5V, -12V, +5VSB.

5.0 Power supply sequencing

5.1 Power on (see fig.1)

5.2 Hold up time
When power shutdown DC output 5V must be maintain 1.6msec in regulation limit at normal input voltage.

5.3 Power off sequence (see fig. 1)

6.0 Signal requirements

6.1 Power good signal (see fig. 1)
The power supply shall provide a "power good" signal to reset system logic, indicate proper operation of the power supply, and give advance warning of impending loss of regulation at turn off. This signal shall be a TTL compatible up level (2.4V to 5.25V) when +5V output voltage are present and above the minimum UV sense levels specified in paragraph 6.2, or a down level (0.0V to 0.8V) when any output is below its minimum UV sense level.
At power on, the power good signal shall have a turn on delay of at least 100ms but not greater than 500ms after the output voltages have reached their respective minimum sense levels..

6.2 Under voltage (UV) sense levels

Output	Minimum sense voltage
+5V	+4.50V

7.0 Environment

7.1 Temperature

Operating temperature	-10 to 40 degrees centigrade
Non-Operating temperature	-20 to 80 degrees centigrade

7.2 Humidity

Operating humidity	20% to 80%
Non-operating humidity	10% to 90%

7.3 Insulation resistance

Primary to secondary	: 30 meg. Ohm min. 500 VDC
Primary to FG	: 30 meg. Ohm min. 500VDC

7.4 Dielectric withstanding voltage

Primary to secondary	: 1500 VAC for 1 sec.
Primary to FG	: 1500 VAC for 1 sec.

8.0 Safety

8.1 Underwriters laboratory (UL) recognition.
The power supply designed to meet UL 60950.

8.2 Canadian standards association (CUL) recognition
The power supply designed to meet CSA 234.

8.3 TUV
The power supply shall be designed to meet TUV EN-60950.

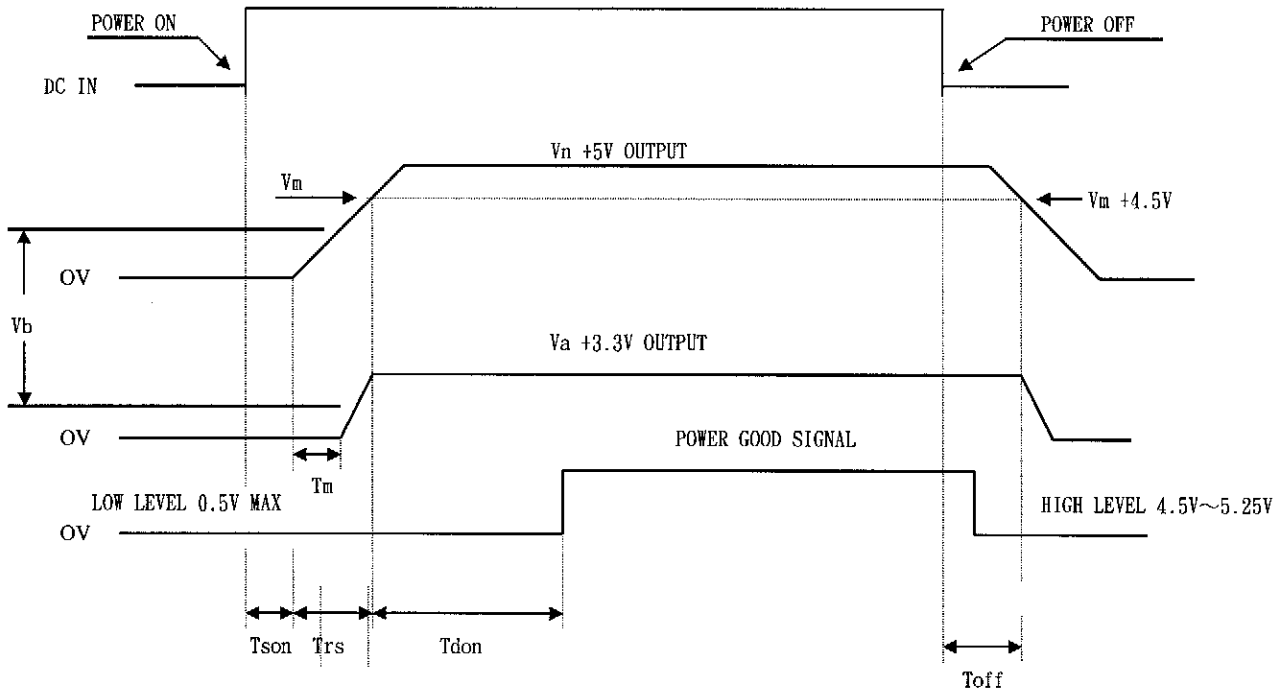
9.0 Reliability

9.1 Burn in
All products shipped to customer must be burn in. The burn in shall be performed at high line voltage.

10.0 Mechanical requirements

10.1 Physical dimension : 40.5 mm * 100 mm * 225 mm (H*W*D)

10.2 Connector power input:
A.POSITRONIC: PLB06M connector
B.Terminal Block.



Vn	Nominal voltages +5V
Vm	Minimum voltages +4.5V
Va	Nominal voltages +3.3V
Vb	+2.0V max
Tson	Switch on time (500 ms. max.)
Trs	+5V rise time (100ms. max.)
Tdon	Delay turn-on (100ms. < Tdon < 500ms.)
Toff	Hold up time (1.6ms. min.)
Tm	Delay time of +3.3V (1ms. min)

《Figure 1》