

SPECIFICATION

for

SWITCHING POWER SUPPLY

M/N : SNP-Z108

Reviewed by Project Manager						
Typed by Document Assistant						
SKYNET ELECTRONIC			LAST REV. NO.			

1.0 INTRODUCTIONS

The SNP-Z108 is a single output, 105Watts version switching power supply.

2.0 INPUT SPECIFICATIONS

2.1 Input voltage

The range of input voltage is from 90VAC to 264VAC. The nominal line voltage is 115V 60Hz/230V 50Hz.

2.2 Input frequency

The range of input frequency is from 47Hz to 63Hz.

2.3 Input current

The maximum input current is 2A at 115VAC or 1A at 230VAC.

2.4 Inrush current

The inrush current will not exceed 30A at 115VAC input or 60A at 230VAC input, cold start, 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

output	min. load	rated load	max load	peak load	voltage accuracy
+15V	0A	7	8.7A	10A	14.9V to 15.1V

At factory, in 60% rated load conditions, the +5V is checked to be within the specified voltage accuracy range.

The power supply can take max. load with 18CFM of forced air flow.

The peak can last for around 10 sec, continuously draw peak load will reduce life time and MTBF, and will probably shut down the power supply.

3.2 Ripple and noise

The peak to peak ripple and noise for each output is less than 120mV at rated load. Measuring is done by 15MHz band width limited oscilloscope and terminated each output with a 0.47uF capacitor.

3.3 Line regulation

The line regulation for each output is less than + -0.5% while measuring at rated load and + -10% of nominal input voltage changing.

3.4 Load regulation

The load regulation for +15V is less than + -1% measuring is done by changing the measured output load + -40% from 60% rated load and nominal line.

3.5 Loading capacitance

The max. loading capacitance is 10000uF at nominal line.

3.6 Remote sense

The compensation of voltage drop for +15V output is 0.5V max.
The +15V output has remote sense capability.

4.0 GENERAL FEATURES

4.1 Efficiency

The efficiency is 85% typ. while measuring at nominal line and rated load.

4.2 Hold up time

The hold up time is longer than 16mS at 115VAC input and rated load, which is measured from the end of the last charging pulse to when the main output drops down to 95% output voltage.

4.3 Protection

For some reason the power supply fails to control itself, the build-in over voltage protection circuit will shut down the outputs to prevent damaging external circuits. The trip point is around 17.6V to 21V. The power supply will go into hiccup mode against short circuit or over load conditions, and will auto-recover while faulty condition is removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0°C to 50°C

5.2 Cooling

Free air convection for 105W.

With 18CFM forced air flow for 130W.

5.2 Storage temperature

-40°C to 85°C

5.4 Operation humidity

5% ~ 95%RH non-condensing

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards

Designed to meet the following standard :

UL 60950

CSA 22.2 NO.234

VDE EN 60950

6.2 EMI standards

Designed to meet the following limits :

EN55022 "B"

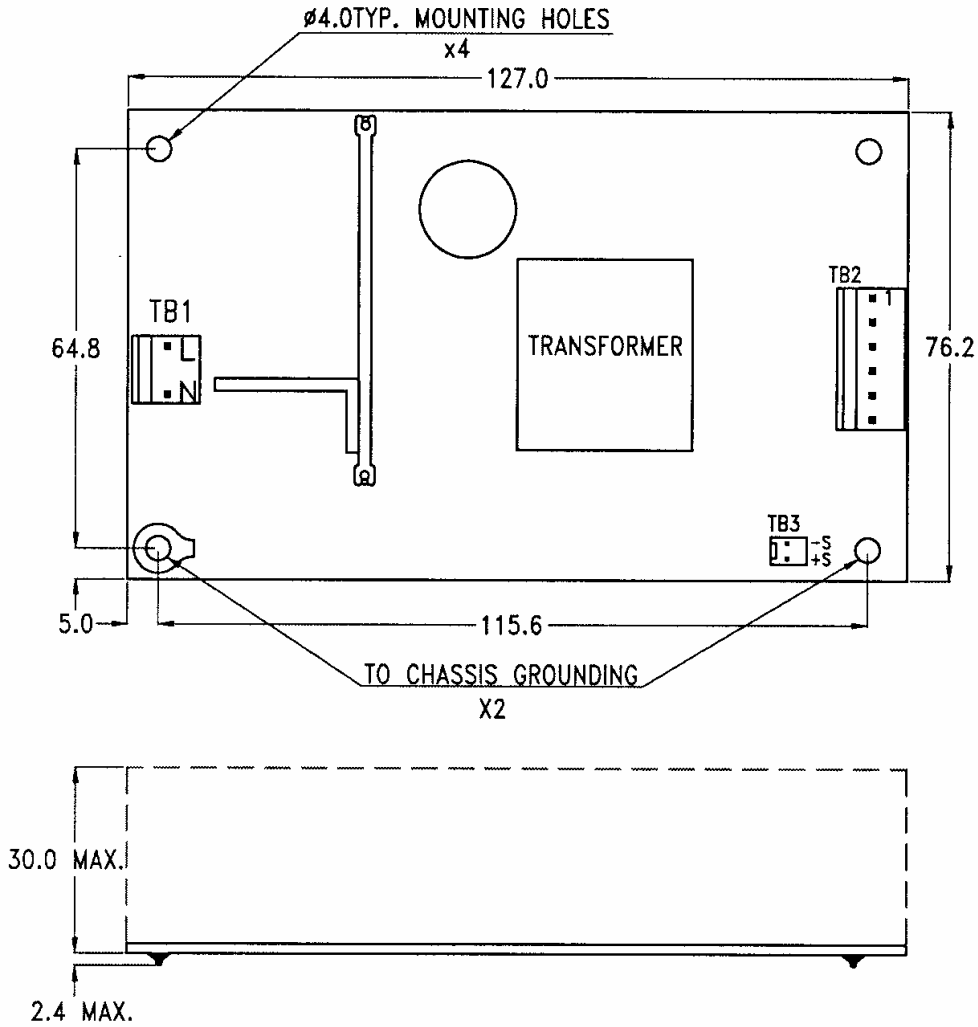
FCC docket 20780 curve "B"

EN61000-3-2

6.3 EMS standards

EN61000-4-2	6KV contact discharge, 8KV air discharge	criteria A
EN61000-4-3	10V/m	criteria A
EN61000-4-4	2KV	criteria A
EN61000-4-5	2KV	criteria A
EN61000-4-6	3V	criteria A
EN61000-4-11	30% dips 10ms	criteria B
	60% dips 100ms	criteria C
	95% dips 5000ms	criteria C

7.0 MECHANICAL SPECIFICATION



7.1 Dimensions

Dimensions shown in mm as above. Tolerance specified is + -0.4mm.

7.2 Connectors

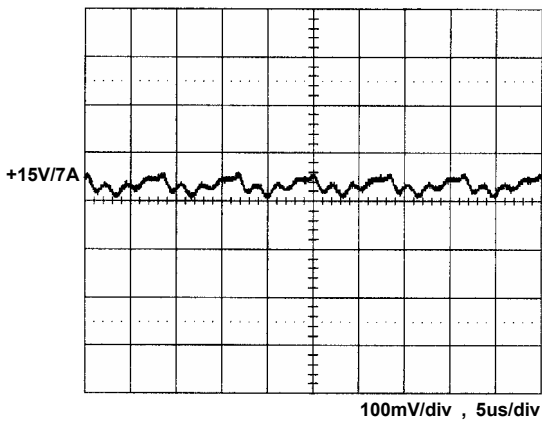
- TB1--AC input : Molex 5277-02A or equivalent
- TB2--DC output : Molex 5273-06A or equivalent
- TB3--Remote Sense : Molex 5045-02A or equivalent

7.3 DC output pin assignment

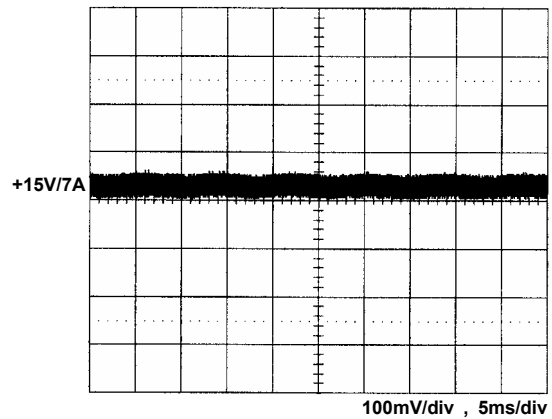
- pin 1 +15V
- 2 +15V
- 3 +15V
- 4 GND
- 5 GND
- 6 GND

8.0 PERFORMANCE (input voltage is 115VAC, unless others specified)

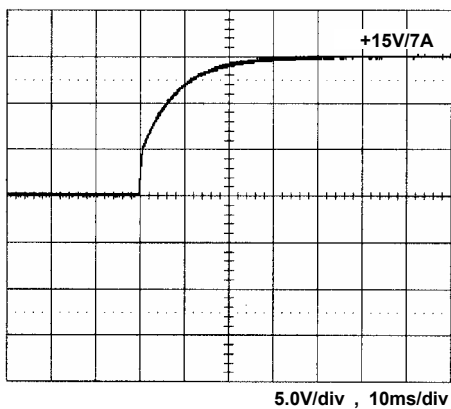
8.1 Switching frequency ripple



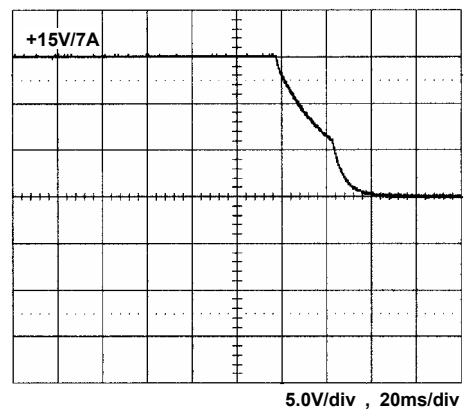
8.2 Line frequency ripple



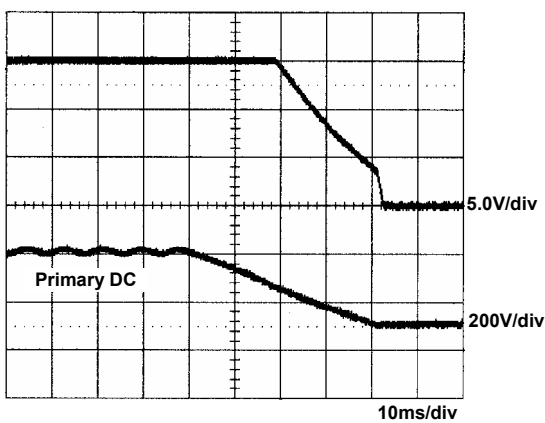
8.3 Output turn on wave form



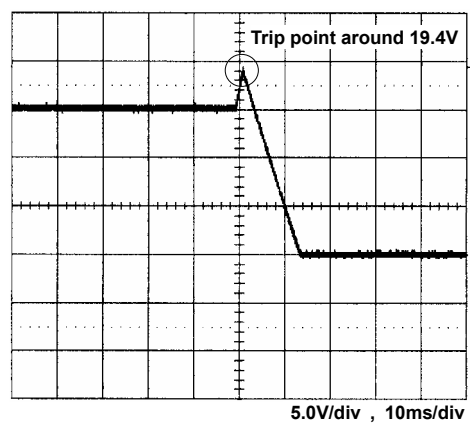
8.4 Output turn off wave form



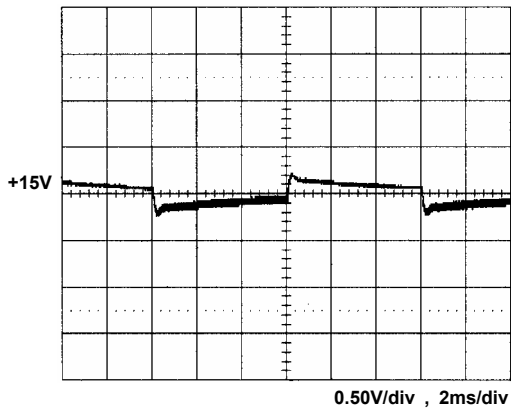
8.5 Hold-up time



8.6 Over voltage protection

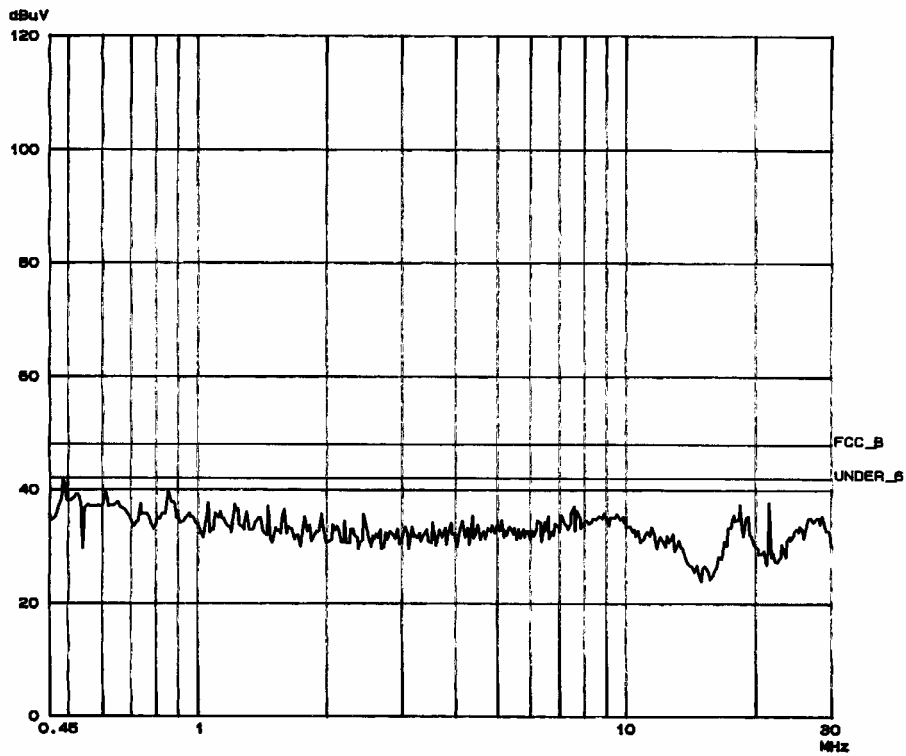


8.7 +15V step response



+15V step from 1.4A to 7A

8.8 FCC B performance



8.9 EN 55022 B

