SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N : SNP-S066

STANDARD PRODUCT

Reviewed by Product Engineer	J~ 11-24-14					
Typed by Document Assistant	11-24-14					
SKYNET ELECTRONIC			**LAST REV. NO.**			

1.0 INTRODUCTIONS

SNP-S066 is a single output 5V/12A, 60W switching power supply.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

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

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 40A at 115VAC input or 70A at 230VAC input cold start, 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

Output	Min. load	Rated load	Peak load	Voltage accuracy
+5V	0A	12A	18A	5.28V to 5.32V

At factory, the +5V output is set between +4.95 to +5.05V at 60% rated load and nominal line input.

The peak power can be last for more than 8 seconds at nominal line.

3.2 Ripple and noise

The peak to peak ripple and noise is less than 1.0% of each output voltage at rated load, nominal line. Measuring is done by 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor.

3.3 Line regulation

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

3.4 Load regulation

The load regulation is less than + -0.5%, which is measured by changing the output load + -40% from 60% rated load, and nominal line input.

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 16ms typ. 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

4.3.1 Over voltage protection

The trip point of over voltage protection is around +5.7V to+7.0V. To recover from over voltage protection, cycle the AC line OFF and ON is necessary.

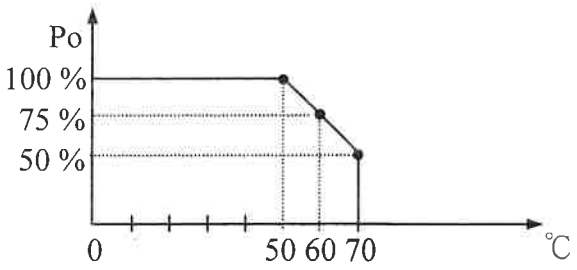
4.3.2 Short circuit and over load protection

The power supply will generate a hiccup mode to protect itself against short circuit or over load conditions, and will automatically return to normal after fault conditions are removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0°C to 70°C (>50°C with derating as below.)



5.2 Storage temperature

-40°C to +75°C

5.3 Operating humidity

10% to 90% Non-Condensing.

5.4 Altitude

Will operate properly at any altitude between 0 to 10000ft.

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards

Designed to meet:

ITE:

UL 60950-1, 2nd Edition, 2014-10-14

CAN / CSA C22.2 No.60950-1-07 2nd Edition , 2014-10

IEC 60950-1:2005+A1+A2

EN 60950-1:2006+A11+A1+A12+A2

Medical:

3.1 Edition:

ANSI /AAMI ES60601-1(2005 / (R) 2012+A1:2012, C1:2009 / (R) 2012+A2:2010 / (R) 2012)

CAN/CSA-C22.2 No.60601-1:14

IEC 60601-1:2005+A1

EN 60601-1:2006+A11+A1+A12

3rd Edition:

ANSI /AAMI ES 60601-1(2005+C1:09+A2:10)

CAN/CSA-C22.2 No. 60601-1(2008)

IEC 60601-1:2005

EN 60601-1:2006+A11+A12

2nd Edition:

UL 60601-1 , 1st Edition

CAN/CSA-C22.2 No.601.1-M90,2005

IEC 60601-1:1988+A1+A2

EN 60601-1:1990+A1+A2+A13

6.2 EMI standards

Designed to meet the following limits :

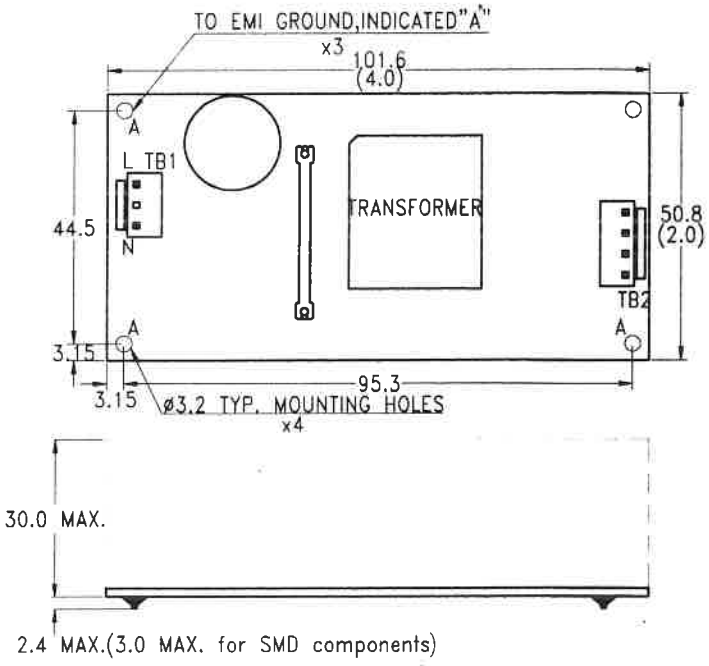
FCC docket 20780 curve "B"

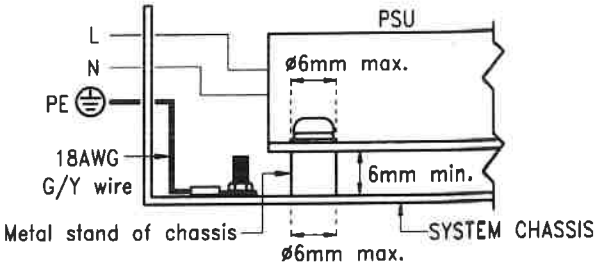
EN55011 class "B"

6.3 EMS standards

EN61000-4-2	8kV/contact discharge, 15kV/air discharge	Criterion A
EN61000-4-3	10V/M with 80% AM	Criterion A
EN61000-4-4	2kV	Criterion A
EN61000-4-5	2kV/Line-Line, 4kV/Line-Earth	Criterion A
EN61000-4-6	10V with 80% AM	Criterion A
EN61000-4-8	30A/m	Criterion A
EN61000-4-11	100% dips 10ms,	Criterion A
	100% dips 20ms,	Criterion B
	30% dips 500ms,	Criterion A
	60% dips 200ms,	Criterion B
	100% dips 5000ms,	Criterion B

7.0 MECHANICAL SPECIFICATION





7.1 Dimensions

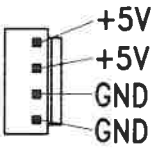
Dimensions shown in mm (inch) as above. Tolerance specified is +-0.4mm (0.016inch).

7.2 Connectors

TB1--AC input : JST B2P3-VH or equivalent.

TB2--DC output : JST B4P-VH or equivalent.

7.3 DC output pin assignment

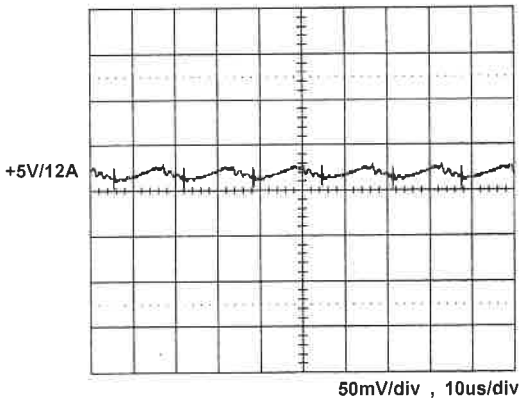


7.4 Packing

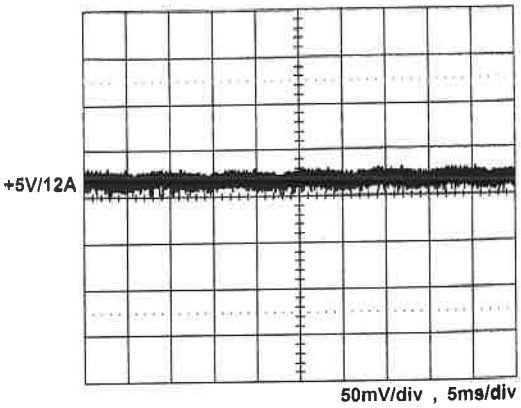
Net weight	: 148g approx. / unit
Carton size(mm)	: 382 (L) x 374 (W) x 277(H)
Quantity	: 80 units / carton
Gross weight	: 13.9 kg approx. / carton

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

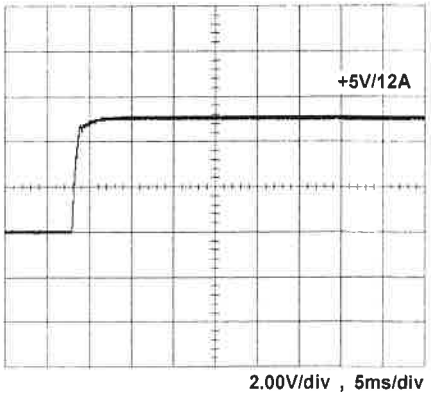
8.1 Switching frequency ripple



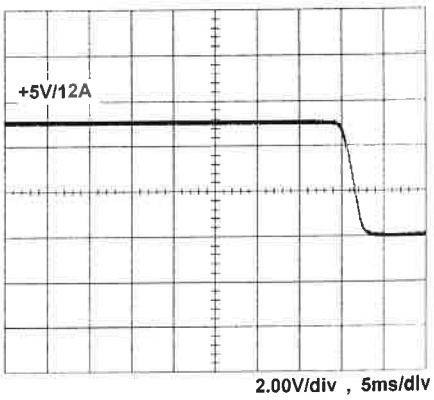
8.2 Line frequency ripple



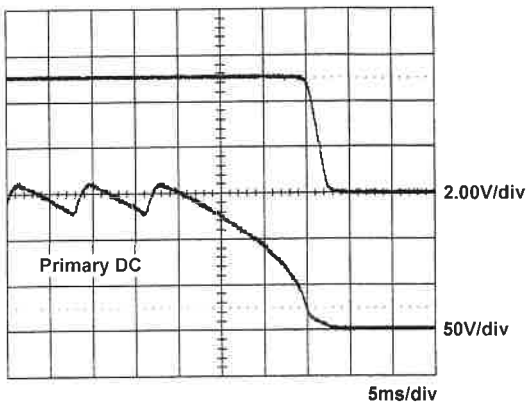
8.3 Output turn on wave form



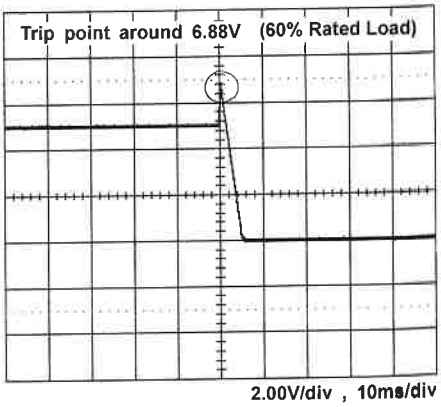
8.4 Output turn off wave form



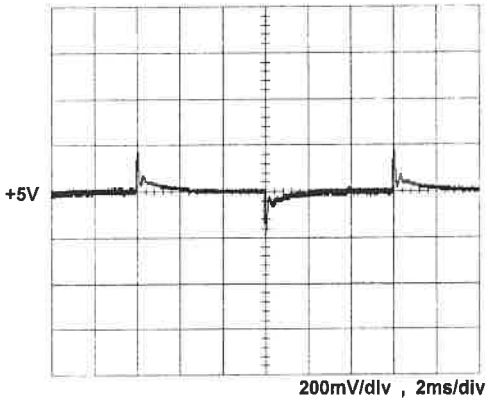
8.5 Hold-up time



8.6 Over voltage protection

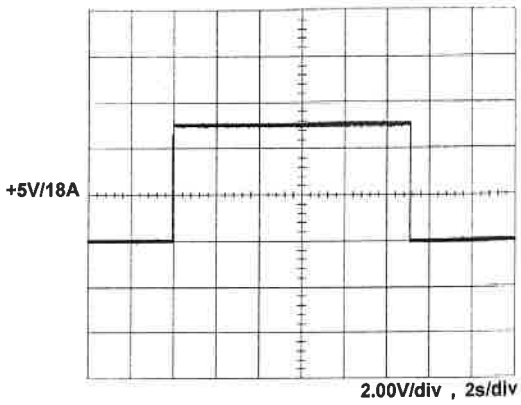


8.7 +5V Step response

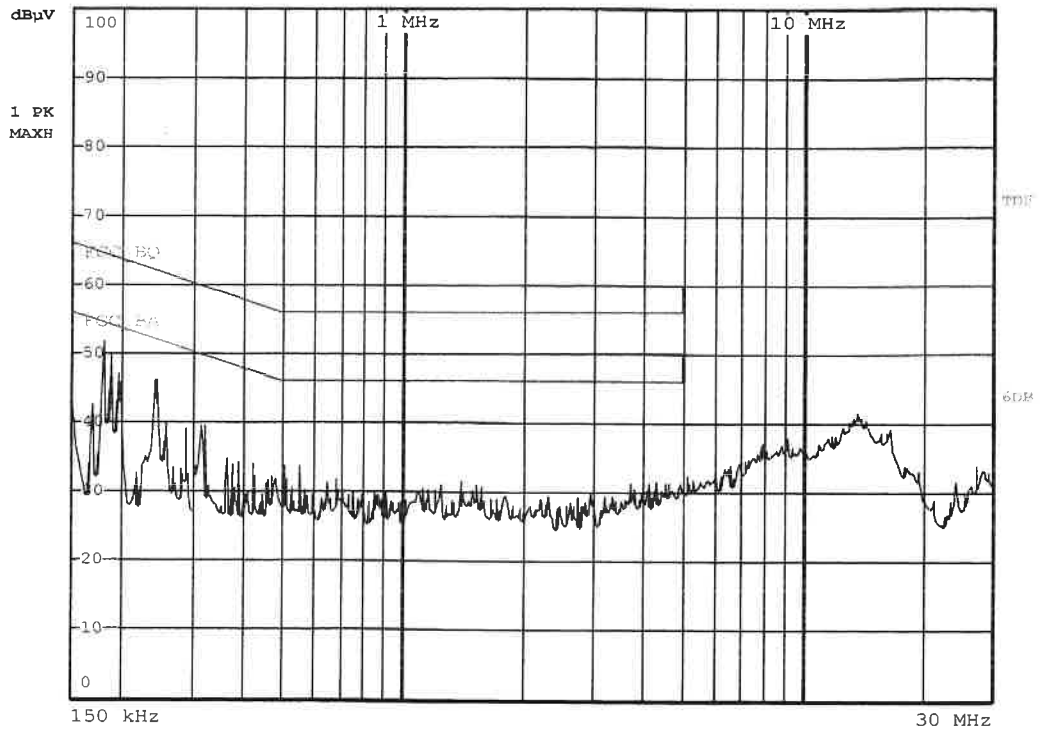


+5V step from 2.4A to 12A

8.8 Peak load



8.9 FCC "B" QP performance



8.10 EN55011 "B" QP performance