

80W SNP-808 Series



Description:

The SNP-808 series is a 80 watts convection cooling and 100 watts forced air cooling switching power supply, with several options of the output, from single to multiple. It is designed for use in general purpose.

Model available:

- SNP-8080 for 5V/6A, 12V/3.5A, -12V/0.5A, -5V/0.5A
- SNP-8081-H for 5V/8A, 3.3V/10A, 12V/0.5A
- SNP-8085 for 5V/6A, 24V/1.5A, 12V/0.5A, -12V/0.5A
- SNP-8086 for 5V/12A, 12V/1A
- SNP-8087 for 12V/6A, 5V/1A
- SNP-8089 for 24V/3A, 5V/1A

General Specifications:

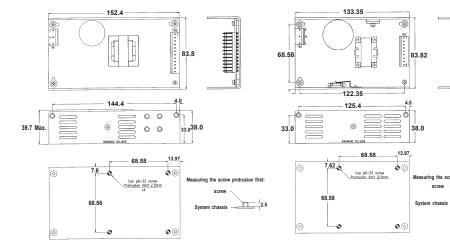
Input voltage	85VAC to 264VAC
Input frequency	47Hz to 63Hz
Inrush current (cold start)	30A at 115VAC
	60A at 230VAC
Efficiency	>70%
Hold up time	16mS typ. at 115VAC
Short circuit protection	hiccup mode
Over voltage protection	crowbar

Operating temperature 0 to 50°C, rated load
forced air 30CFM
Storage temperature20°C to +70°C
Ripple and noise
EMI meet FCC docket 20780 curve "B"
EN55022 "B"
EMS meet IEC-801-2 8KV air discharge
IEC-801-3 3V/M, IEC-801-4 2KV, IEC-801-5 2KV
Safety meet UL 60950-1
CSA C22.2 No. 60950, TUV EN 60950-1

Mechanical Specifications:

SNP-8080,-8081-H,-8085

SNP-8086,-8087,-8089



Notes:

- 1. Dimensions shown in mm as left. Tolerance specified is $\pm\,0.4\,$ mm between mounting holes, and $\pm\,0.8$ mm for other dimension.
- 2. P.C.B. Size: 83.8 x 152.4 X 38 (mm) for SNP-8080,-8081-H,-8085 83.82 x 133.35 x 38 (mm) for SNP-8086,-8087,-8089
- 3. Packing:
 Net weight: 425 g approx. / unit
 Gross weight: 12.5 kg approx. / carton,
 24 units / carton
 - Carton size (mm): 360 (L) x 276 (W) x 379 (H)
 Connectors:
 - TB1 -- AC input : Molex 5273-X withdraw 2 pins or equivalent.

TB2 -- DC output: Molex 5273-X or equivalent.

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5. DC output Pin Assignment

Model No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SNP-8080	+5V	+5V	+5V	GND	GND	GND	GND	+12V	+12V	-12V	-5V	N/C		
SNP-8081-H	+5V	+5V	+5V	GND	GND	GND	GND	GND	+3.3V	+3.3V	+3.3V	+3.3V	GND	+12V
SNP-8085	+5V	+5V	+5V	GND	GND	GND	GND	+24V	+24V	GND	-12V	+12V		
SNP-8086	+5V	+5V	+5V	GND	GND	GND	GND	+12V	+12V					
SNP-8087	+12V	+12V	+12V	GND	GND	GND	GND	+5V	+5V					
SNP-8089	+24V	+24V	+24V	GND	GND	GND	GND	+5V	+5V					

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD MIN. RATED MAX		MAX.	VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	
110.	TO HE	1711111	TUTTED	11111111	7 ICCOM ICT	TOBE	KEG.	REG.	
SNP-8080	+5V	1A	6A	10A	+4.95V~+5.05V	50mV	±1%	±1%	
	+12V	0A	3.5A	6A	+11.25V~+12.75V	120mV	±1%	±5%	
	-12V	0A	0.5A	1A	−11.25~−12.75V	120mV	±1%	±5%	
	-5V	0A	0.5A	1A	-4.75~-5.25V	50mV	±1%	±5%	
SNP-8081-H	+5V	0.5A	8A	10A	+5.05V~+5.15V	50mV	±1%	±3%	
	+3.3V	0.5A	10A	12A	+3.3V~+3.45V	50mV	±2%	+6%/-4%	
	+12V	0.1A	0.5A	1A	+11.25V~+13.00V	120mV	±2%	+12%/-8%	
SNP-8085	+5V	2.0A	6A	10A	+4.90V~+5.10V	50mV	±1%	±1%	
	+24V	0A	1.5A	2A	+22.80V~+25.20V	240mV	±1%	±4%	
	+12V	0A	0.5A	1A	+11.25V~+12.75V	120mV	±1%	±4%	
	-12V	0A	0.5A	1A	-11.25V~-13.00V	120mV	±2%	±7%	
SNP-8086	+5V	2A	12A	16A	+5.05V~+5.15V	50mV	±1%	±1%	
	+12V	0A	1A	1.5A	+11.25V~+12.75V	120mV	±1%	±10%	
SNP-8087	+12V	0A	6A	8A	+11.80V~+12.20V	120mV	±1%	±1%	
	+5V	0A	1A		+4.75V~+5.25V	50mV	±1%	±4%	
SNP-8089	+24V	0A	3A	4A	+23.76V~+24.24V	240mV	±1%	±1%	
	+5V	0A	1A		+4.75V~+5.25V	50mV	±1%	±1%	

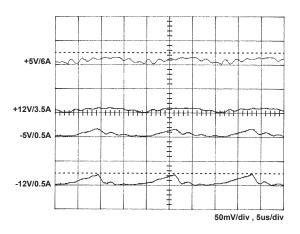
Notes:

- 1. Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
- 2. At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the specified accuracy range at rated load.
- 3. Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- 6. Hold up time is measured from the end of the last charging pulse to the time which the main output drop down to regulation limit at rated load and nominal line.
- 7. Rated load is maximum loading for flat mounting and free air convection cooling.
- 8. Performance of turn on peak power is shown in figure 9, page 4-4. Rising edge means power on, falling edge means over load protection happened.

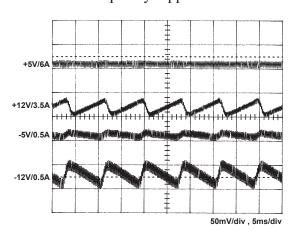
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Performance for SNP-8080:

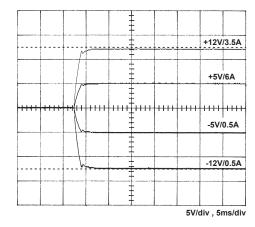
1. Switching frequency ripple



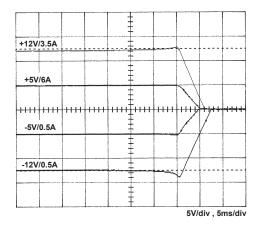
2. Line frequency ripple



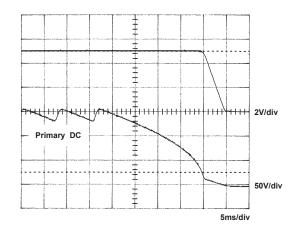
3. Output turn on wave form



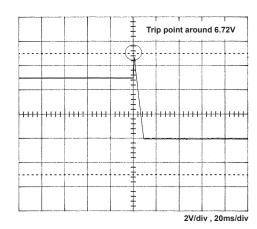
4. Output turn off wave form



5. Hold-up time



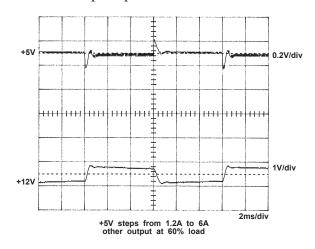
6. Over voltage protection



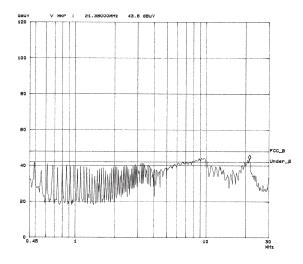
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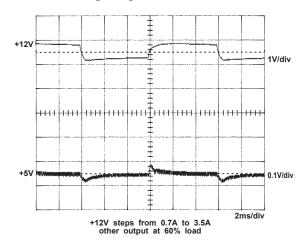
7. +5V step response



9. FCC B



8. +12V step response



10. EN55022 B

