General Purpose

Rated 45W
Peak 60W
SNP-Y04 Series

2" x 4" x 1.18"

Features:

- Only 1.1 inch height
- 4.7 Watt per cubic inch
- With ITE & Medical safety
- Efficiency between 76% to 85%
- Operation from 0°C to 70°C by convection
- Single side PCB for low assembly cost

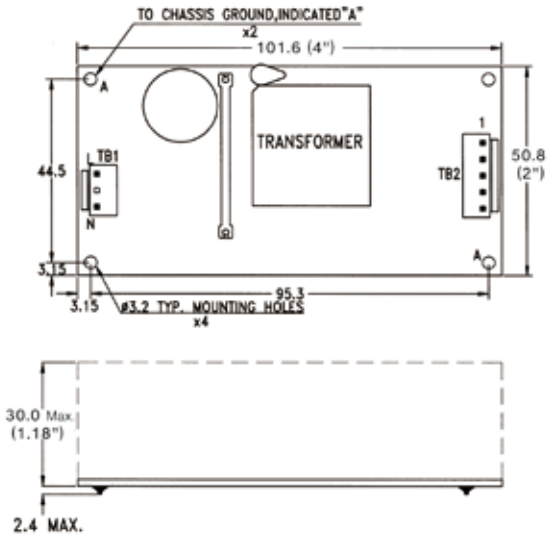
Applications:

- For medical dental, pumps, monitors, sleep apnea device, and many other uses.
- For ITE audio equipment, telecommunication, network, IPC, instrument equipment, and other uses.

General Specifications:

Input voltage ..... 90VAC to 264VAC
Input frequency..... 47Hz to 63Hz
Inrush current ..... < 30A at 115VAC
(cold start at 25°C) or < 60A at 230VAC
Efficiency ..... 76%~85% depends on models at rated load and 115VAC
Hold up time ..... 14ms typical
Earth leakage current ..... < 300uA
Over load protection ..... auto recovery
Short circuit protection ..... auto recovery
Over voltage protection ..... latch off
Operating temperature ..... 0°C to 70°C convection derating: 2.5% / °C > 50°C
Cooling ..... free air convection
Storage temperature .....-40°C to +85°C
EMI ..... FCC "B" EN55022"B", EN55011"B"
EMS EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety ..... UL/CSA/EN 60950-1, 2nd edition ANSI/AAMI/CSA/EN 60601-1 3rd edition + A1

Mechanical Specifications:



Notes:

1. Size:
   2" x 4" x 1.18"
2. Mounting Hole:
   44.5 x 95.3 (mm)
3. Connectors
   AC input: JST B2P3-VH or equivalent
   DC output: JST B4P-VH or equivalent for single
   JST B6P-VH or equivalent for multiple outputs
4. Output Pin assignment

PIN NO.	1	2	3	4	5	6
SNP-Y041	+5V	+5V	GND	GND	+12V	-12V
SNP-Y043	+5V	+5V	GND	GND	+12V	NC
SNP-Y04F	+5V	+5V	GND	GND	+24V	+12V
SNP-Y046	+5V	+5V	GND	GND		
SNP-Y047	+12V	+12V	GND	GND	+5V	NC
SNP-Y047-1	+12V	+12V	GND	GND		
SNP-Y048	+15V	+15V	GND	GND	+5V	NC
SNP-Y048-1	+15V	+15V	GND	GND		
SNP-Y049	+24V	+24V	GND	GND	+5V	NC
SNP-Y049-1	+24V	+24V	GND	GND		
SNP-Y04T	+48V	+48V	GND	GND		
SNP-Y04D	+3.3V	+3.3V	GND	GND	+5V	+12V

5. Packing
   Net weight: 127 g approx. / unit
   Gross weight: 12.6 kg approx. / carton, 80 units / carton
   Carton size (mm): 382 (L) x 374 (W) x 277 (H)

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10 years Warranty (contact Skynet's Distributors for details)

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD MIN.	LOAD RATED	LOAD MAX.	LOAD PEAK	VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	EFFICIENCY TYPICAL
SNP-Y041	+5V +12V -12V	0A 0A 0A	3A 2A 0.3A	4A 3A	5A 4A	+4.9V~+5.1V +11.4V~+12.6V -11.4V~-12.6V	1% 1% 1%	±1% ±1% ±1%	±3% ±3% ±5%	80%
SNP-Y043	+5V +12V	0A 0A	3A 2.3A	4A 3.3A	5A 4A	+4.9V~+5.1V +11.4V~+12.6V	1% 1%	±1% ±1%	±3% ±3%	80%
SNP-Y04F	+5V +24V +12V	0A 0A 0A	3A 1A 0.3A	4A 1.5A	6A 2.4A	+4.95V~+5.05V +22,8V~+25.2V +11.4V~+12.6V	1% 1% 1%	±1% ±1% ±1%	±3% ±3% ±5%	81%
SNP-Y046	+5V	0A	7A		10A	+4.95V~+5.05V	1%	±1%	±1%	77%
SNP-Y047	+12V +5V	0A 0A	3.3A 0.5A		5A	+11.88V~+12.12V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	80%
SNP-Y047-1	+12V	0A	3.3A		5A	+11.88V~+12.12V	1%	±1%	±1%	81%
SNP-Y048	+15V +5V	0A 0A	2.6A 0.5A		4A	+14.85V~+15.15V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	80%
SNP-Y048-1	+15V	0A	3A		4A	+14.85V~+15.15V	1%	±1%	±1%	81%
SNP-Y049	+24V +5V	0A 0A	1.7A 0.5A		2.5A	+23.75V~+24.24V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	82%
SNP-Y049-1	+24V	0A	1.9A		2.5A	+23.75V~+24.24V	1%	±1%	±1%	83%
SNP-Y04T	+48V	0A	1A		1.35A	+47.6V~+48.4V	1%	±1%	±1%	85%
SNP-Y04D	+3.3V +5V +12V	0A 0A 0A	4A 3A 0.3A		5A 4A	+3.26V~+3.33V +4.75V~+5.25V +11.40V~+12.80V	1% 1% 1%	±1% ±1% ±1%	±3% ±3% ±5%	75%

Note:

1. At peak load, the output can last for 8 seconds without shut down.
2. The maximum combinational load of SNP-Y04D for +3.3V & +5V is 28W.
3. 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.
4. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
5. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
6. 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.
7. 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.
8. The efficiency is measured at nominal line and rated load.
9. Model Selection:
   SNP-Y04x is for both of ITE application and for medical application.

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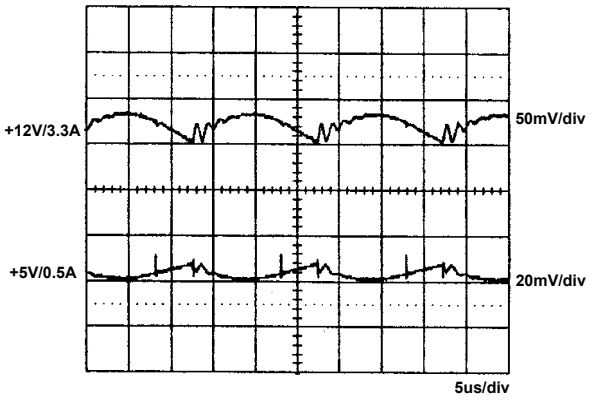
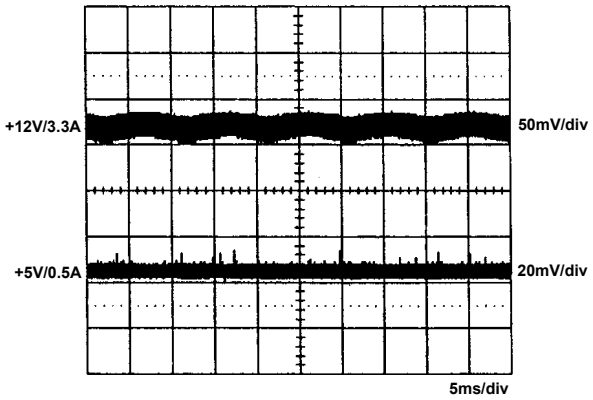
Performance for SNP-Y047:

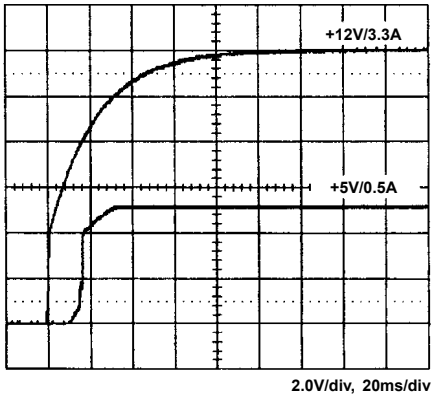
1. Switching frequency ripple



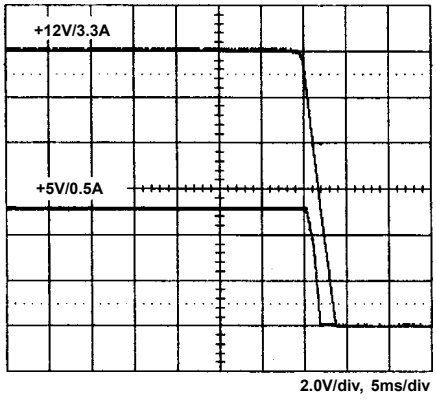
2. Line frequency ripple



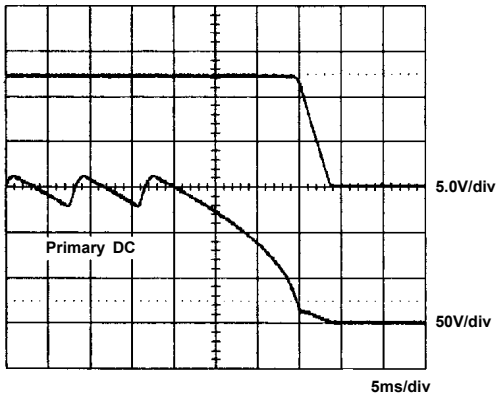
3. Output turn on wave form



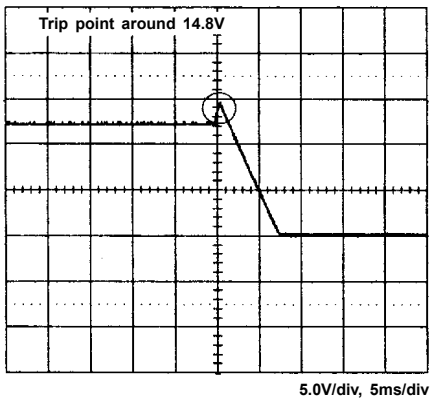
4. Output turn on wave form



5. Hold-up time



6. Over voltage protection



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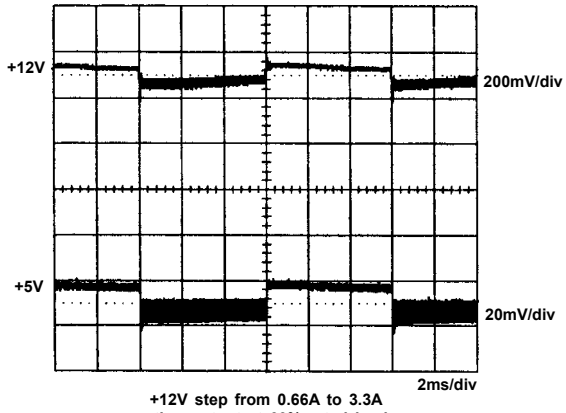
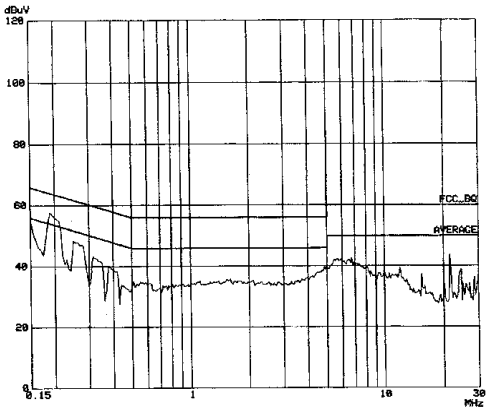
7. +12V step response

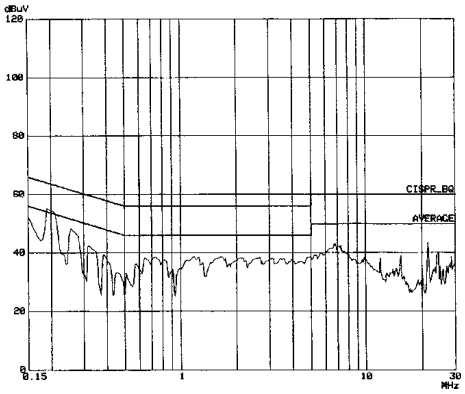


+12V step from 0.66A to 3.3A
other output at 60% rated load

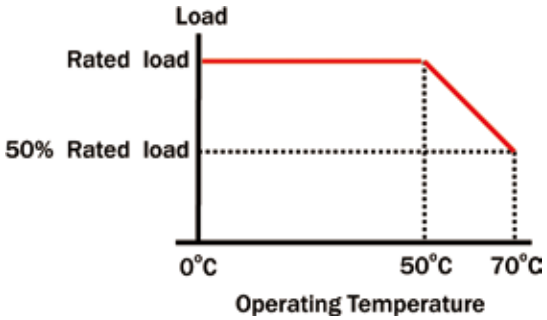
8. FCC B



9. EN 55011 B



10. Power derating curve



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