



2" x 4" x 1.102"

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

Features:

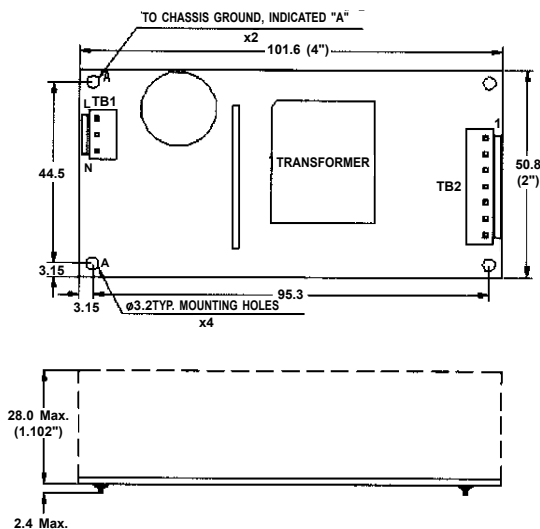
- Only 1.1 inch height
- 4.7 Watt per cubic inch
- With ITE & Medical safety
- Efficiency between 76% to 85%
- Operation from 0°C to 70°C by convection
- Single side PCB for low assembly cost

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.

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 60950-1, UL 60601-1
 CSA C22.2 No. 60950-1, 601.1
 EN 60950-1, EN 60601-1

Mechanical Specifications:



Notes:

1. Size:
2" x 4" x 1.102"
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)

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.	EFFICIENCY TYPICAL
		MIN.	RATED	MAX.	PEAK					
SNP-Y041	+5V	0A	3A	4A	5A	+4.9V~+5.1V	1%	±1%	±3%	80%
	+12V	0A	2A	3A	4A	+11.4V~+12.6V	1%	±1%	±3%	
	-12V	0A	0.3A			-11.4V~-12.6V	1%	±1%	±5%	
SNP-Y043	+5V	0A	3A	4A	5A	+4.9V~+5.1V	1%	±1%	±3%	80%
	+12V	0A	2.3A	3.3A	4A	+11.4V~+12.6V	1%	±1%	±3%	
SNP-Y04F	+5V	0A	3A	4A	6A	+4.95V~+5.05V	1%	±1%	±3%	81%
	+24V	0A	1A	1.5A	2.4A	+22.8V~+25.2V	1%	±1%	±3%	
	+12V	0A	0.3A			+11.4V~+12.6V	1%	±1%	±5%	
SNP-Y046	+5V	0A	7A		10A	+4.95V~+5.05V	1%	±1%	±1%	77%
SNP-Y047	+12V	0A	3.3A		5A	+11.88V~+12.12V	1%	±1%	±1%	80%
	+5V	0A	0.5A			+4.75V~+5.25V	1%	±1%	±1%	
SNP-Y047-1	+12V	0A	3.3A		5A	+11.88V~+12.12V	1%	±1%	±1%	81%
SNP-Y048	+15V	0A	2.6A		4A	+14.85V~+15.15V	1%	±1%	±1%	80%
	+5V	0A	0.5A			+4.75V~+5.25V	1%	±1%	±1%	
SNP-Y048-1	+15V	0A	3A		4A	+14.85V~+15.15V	1%	±1%	±1%	81%
SNP-Y049	+24V	0A	1.7A		2.5A	+23.75V~+24.24V	1%	±1%	±1%	82%
	+5V	0A	0.5A			+4.75V~+5.25V	1%	±1%	±1%	
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	0A	4A		5A	+3.26V~+3.33V	1%	±1%	±3%	75%
	+5V	0A	3A		4A	+4.75V~+5.25V	1%	±1%	±3%	
	+12V	0A	0.3A			+11.40V~+12.80V	1%	±1%	±5%	

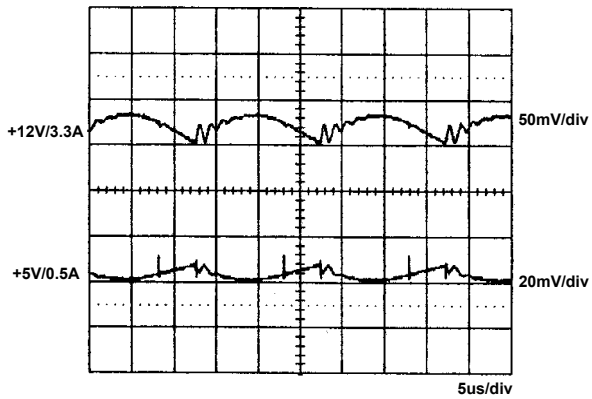
Note:

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

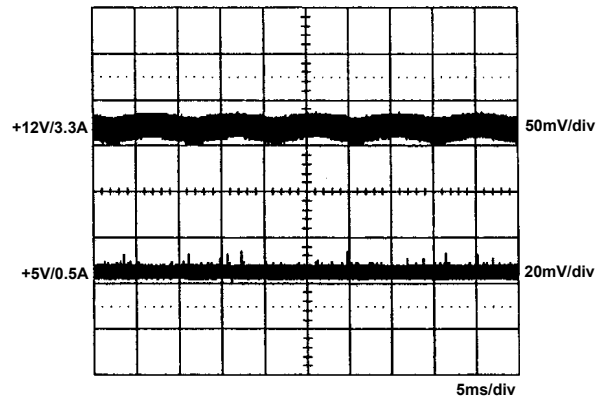
-Clark-

Performance for SNP-Y047:

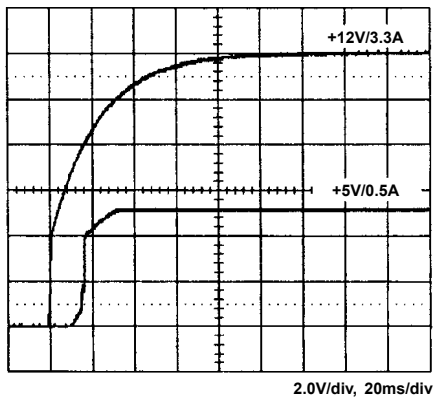
1. Switching frequency ripple



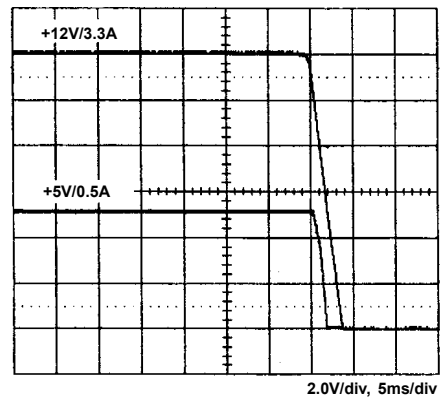
2. Line frequency ripple



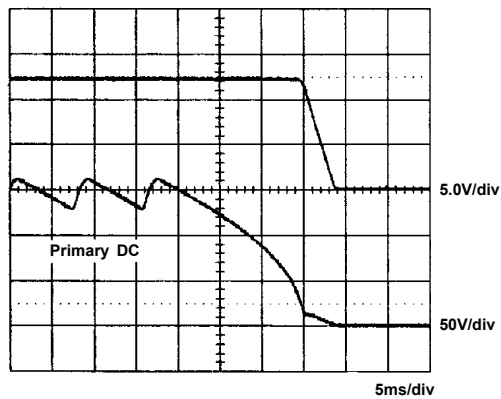
3. Output turn on wave form



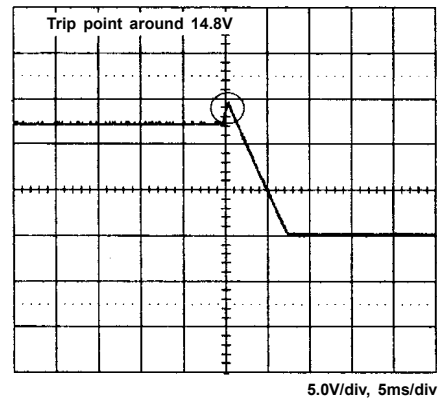
4. Output turn on wave form



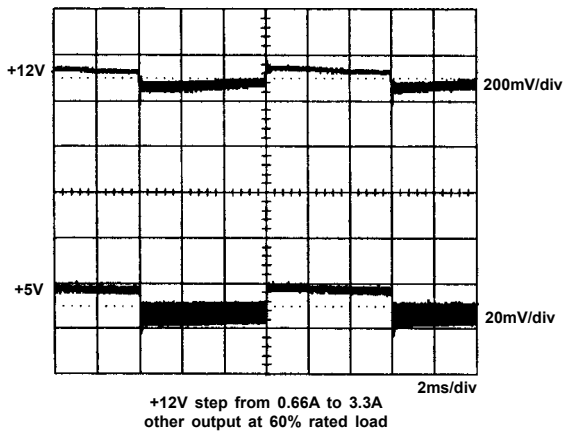
5. Hold-up time



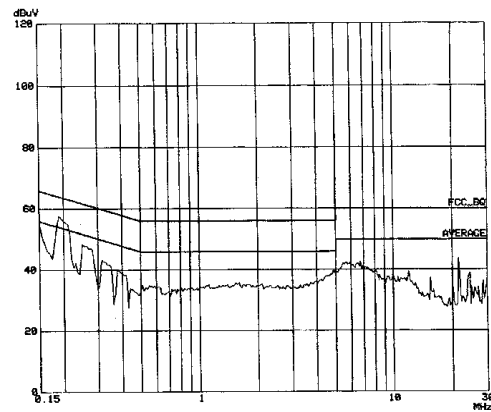
6. Over voltage protection



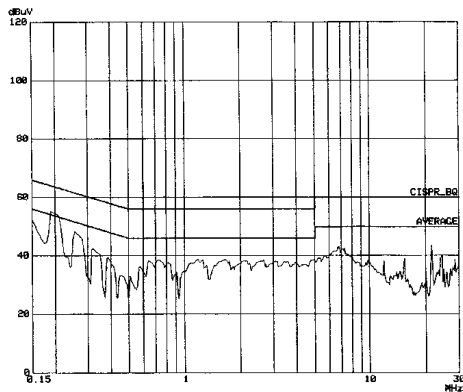
7. +12V step response



8. FCC B



9. EN 55011 B



10. Power derating curve

