



Features:

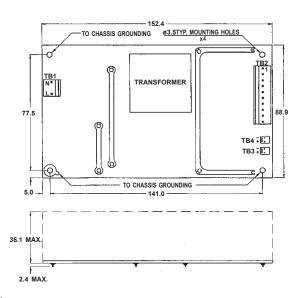
- Only 1.36 inch height
- 3.8 Watt per cubic inch
- With ITE & Medical safety
- Efficiency between 78% to 87%
- Operation from 0°C to 70°C by convection
- Single side PCB for low assembly cost

General Specifications:

Input voltage	90VAC to 264VAC
Input frequency	47Hz to 63Hz
Inrush current	less than 30A at 115VAC
	less than 60A at 230VAC
Efficiency	. 78%~87% depends on models
	at rated load and 115VAC
Hold up time	20ms typical
	at rated load and 115VAC
Earth leakage current	< 300uA
Over load protection	auto recovery

auto recover
latch off
pe)0°C to 70°C
derating: $2.5\% / ^{\circ}\text{C} > 50 ^{\circ}\text{C}$
free air convection
40°C to +85°C
FCC "B"
EN55022"B", EN55011"B"
1000-4-2,-3,-4,-5,-6,-8,-11
EN61000-3-2 class "A"
UL 60950-1, UL 60601-1
C22.2 No. 60950-1, 601.1
EN 60950-1, EN 60601-1

Mechanical Specifications:



Dimensions shown in mm as left. Tolerance: + -1mm (Excluding cables).

Dimensions shown in min as left. Tolerance. # -Think \(\) Size:

88.9 \(\text{ X } 152.4 \text{ X } 36.1 \) (mm)

3.5" \(\text{ X } 6" \text{ X } 1.42" \)

Packing

Net weight: 360 g approx. / unit

Gross weight: 74 kg approx. / carton, 32 units / carton

Carton size (mm): 477 (L) \(\text{ X } 290 \) (W) \(\text{ X } 379 \) (H)

Connectors

Connectors
a) TB1-AC input
b) TB2-DC output Molex 5277-02A or equivalent Molex 5277-10A or equivalent for single to triple outputs Molex 5277-12A or equivalent for quad outputs Molex 5045-02A or equivalent for all models Molex 5045-02A or equivalent for all models

c) TB3-LED d) TB4-FAN Output Pin assignment

	_											
PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12
SNP-Y111	+5V	+5V	+5V	GND	GND	GND	+12V	+12V	-12V	NC		
SNP-Y117	+12V	+12V	+12V	+12V	GND	GND	GND	GND	+5V	NC		
SNP-Y117-1	+12V	+12V	+12V	+12V	GND	GND	GND	GND	NC	NC		
SNP-Y118	+15V	+15V	+15V	+15V	GND	GND	GND	GND	+5V	NC		
SNP-Y118-1	+15V	+15V	+15V	+15V	GND	GND	GND	GND	+5V	NC		
SNP-Y119	+24V	+24V	+24V	+24V	GND	GND	GND	GND	+5V	NC		
SNP-Y119-1	+24V	+24V	+24V	+24V	GND	GND	GND	GND	NC	NC		
SNP-Y11T	+48V	+48V	+48V	+48V	GND	GND	GND	GND	NC	NC		
SNP-Y110	+5V	+5V	+5V	GND	GND	GND	+12V	+12V	-12V	GND	-5V	NC
SNP-Y11F	+5V	+5V	+5V	GND	GND	GND	+24V	+24V	+12V	GND	-12V	NC
SNP-Y11E	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+5V	+5V	+12V	-12V



Output Specifications:

MODEL	OUTPUT	LOAD				VOLTAGE	RIPPLE	LINE	LOAD	EFFICIENCY
NO.	RAIL	MIN.	RATED	MAX.	PEAK	ACCURACY	NOISE	REG.	REG.	TYPICAL
SNP-Y111	+5V +12V -12V	0A 0A 0A	7A 5A 0.5A	13A 7A	20A 11A	+4.95V~+5.05V +11.4V~+12.6V -11.4V~-12.6V	1% 1% 1%	±1% ±1% ±1%	±3% ±3% ±5%	82%
SNP-Y11E	+3.3V +5V +12V -12V	0A 0A 0A 0A	10A 8A 2A 0.2A	12A 10A		+3.2V~+3.4V +4.75V~+5.25V +11.4V~+12.6V -11.4V~-12.6V	50mV 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±5%	78%
SNP-Y116	+5V	6A	19A			+4.95V~+5.05V	1%	±1%	±1%	80%
SNP-Y117	+12V +5V	0A 0A	8.5A 1A		13A	+11.88V~+12.12V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	83%
SNP-Y117-1	+12V	0A	9A		13A	+11.88V~+12.12V	1%	±1%	±1%	84%
SNP-Y118	+15V +5V	0A 0A	7A 1A		10.5A 1A	+14.85V~+15.15V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	83%
SNP-Y118-1	+15V	0.1A	7A		10.5A	+14.85V~+15.15V	1%	±1%	±1%	84%
SNP-Y119	+24V +5V	0A 0A	4.5A 1A		6.5A 1A	+23.75V~+24.24V +4.75V~+5.25V	1% 1%	±1% ±1%	±1% ±1%	85%
SNP-Y119-1	+24V	0.1A	4.5A		6.5A	+23.75V~+24.24V	1%	±1%	±1%	86%
SNP-Y11T	+48V	0A	2.3A		3.5A	+47.6V~+48.4V	1%	±1%	±1%	87%
SNP-Y110	+5V +12V -12V -5V	0A 0A 0A 0A	6A 5A 0.5A 0.5A	13A 7A	20A 11A	+4.95V~+5.1V +11.4V~+12.6V -11.4V~-12.6V -4.75V~-5.25V	1% 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±3%	82%
SNP-Y11F	+5V +24V +12V -12V	0A 0A 0A 0A	6A 2A 2A 0.3A	10A 3A	15A 5.5A	+4.9V~+5.1V +22.8V~+25.2V +11.4V~+12.6V -11.4V~-12.6V	1% 1% 1% 1%	±1% ±1% ±1% ±1%	±3% ±3% ±5% ±5%	82%

Note:

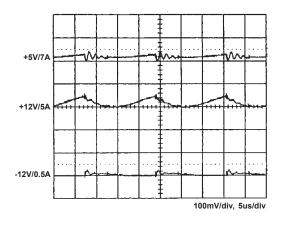
- 1. At peak load, the output can last for 8 seconds without shut down.
- 2. The maximum combinational load of SNP-Y06D for +3.3V & +5V is 38W.
- 3. At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the 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.

-Clark-

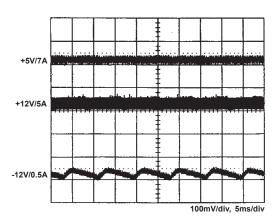


Performance for SNP-Y111:

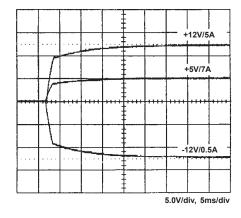
1. Switching frequency ripple



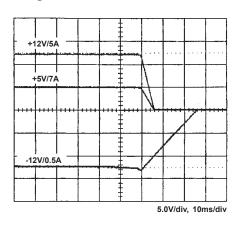
2. Line frequency ripple



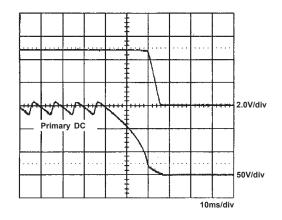
3. Output turn on wave form



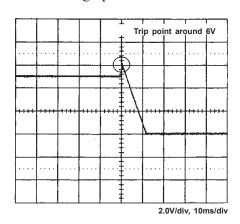
4. Output turn off wave form



5. Hold-up time



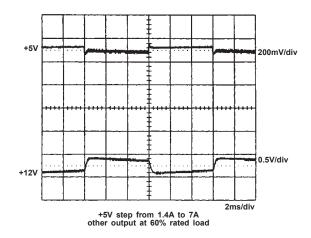
6. Over voltage protection



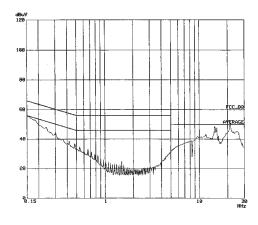
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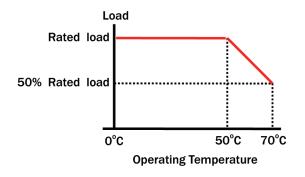
7. +5V step response



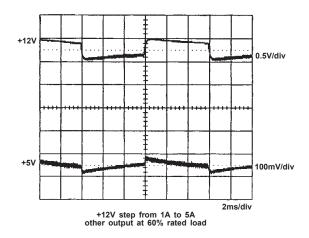
9. FCC B



11. Power derating curve



8. +12V step response



10. EN 55011 B

