

3.5" x 6" x 1.42"

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 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

Features:

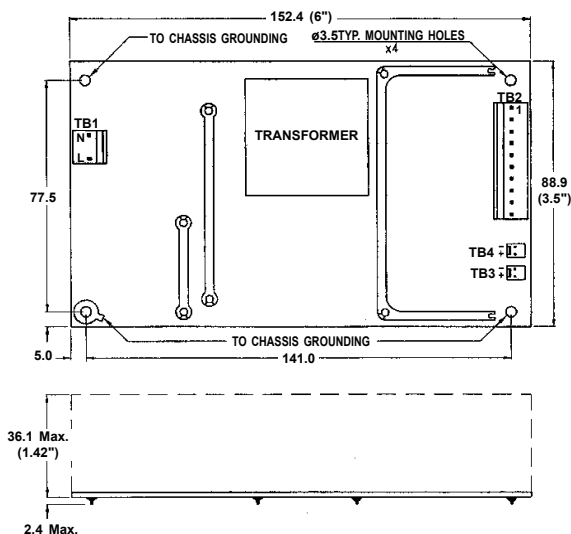
- Only 1.36 inch height
- 3.8 Watt per cubic inch
- With ITE & Medical safety
- Efficiency between 78% to 87%
- Operation from 0°C to 70°C by convection
- Single side PCB for low assembly cost

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.

Short circuit protection auto recover
 Over voltage protection latch off
 Operating temperature (open frame type) 0°C to 70°C
 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
 Harmonics EN61000-3-2 class "A"
 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: 3.5" x 6" x 1.42"
2. Mounting Hole: 77.5 x 141 (mm)
3. Connectors
 - a) TB1-AC input : Molex 5277-02A or equivalent
 - b) TB2-DC output : Molex 5277-10A or equivalent for single to triple outputs
Molex 5277-12A or equivalent for quad outputs
 - c) TB3-LED : Molex 5045-02A or equivalent for all models
 - d) TB4-FAN : Molex 5045-02A or equivalent for all models
4. Output Pin assignment

| PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|------------|-------|-------|-------|------|-----|-----|------|------|------|-----|------|------|
| SNP-Y11I | +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 | GND | 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 |

5. Packing
 Net weight: 360 g approx. / unit
 Gross weight: 74 kg approx. / carton, 32 units / carton
 Carton size (mm): 477 (L) x 290 (W) x 379 (H)

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

Output Specifications:

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

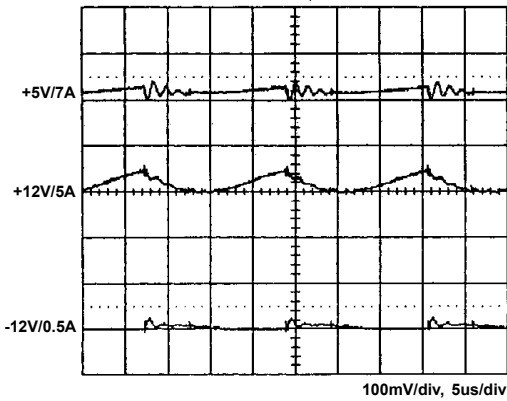
Note:

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.
9. Model Selection:
SNP-Y09x is for both of ITE application and for medical application.

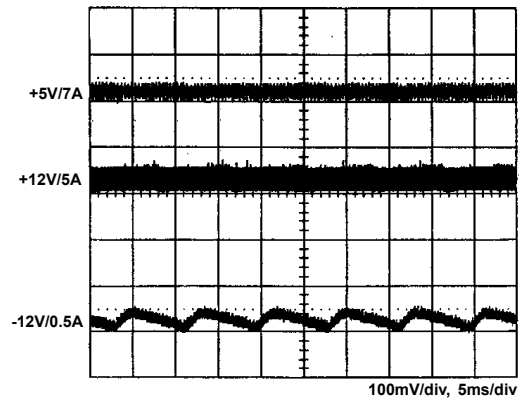
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Performance for SNP-Y111:

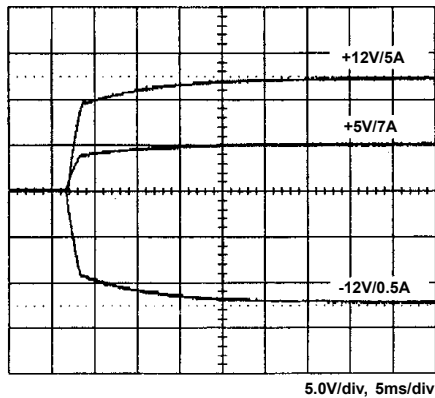
1. Switching frequency ripple



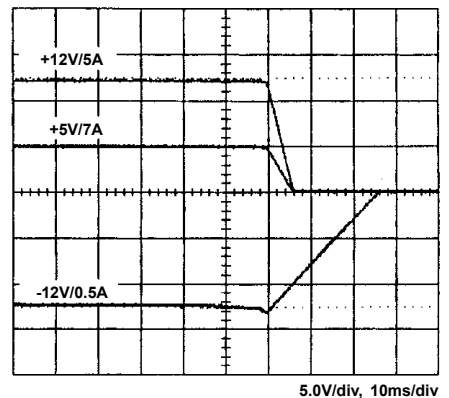
2. Line frequency ripple



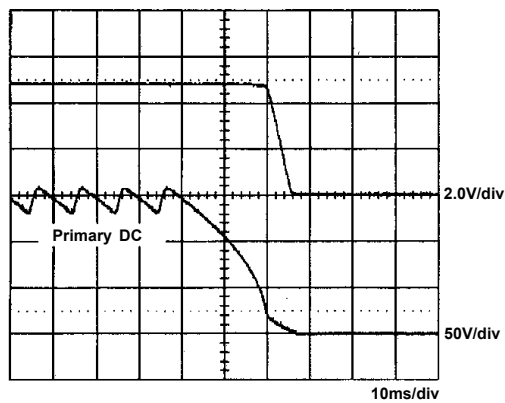
3. Output turn on wave form



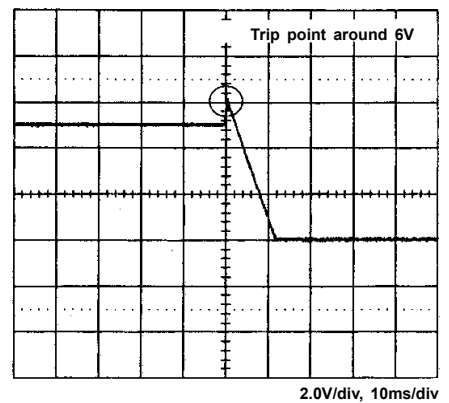
4. Output turn off wave form



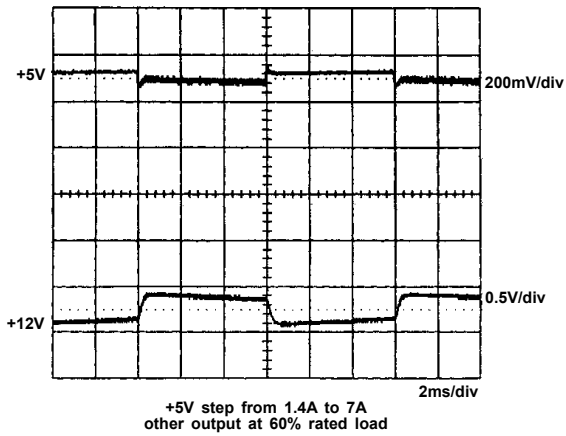
5. Hold-up time



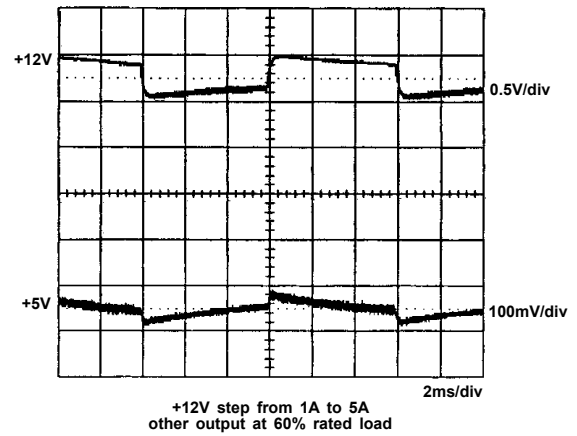
6. Over voltage protection



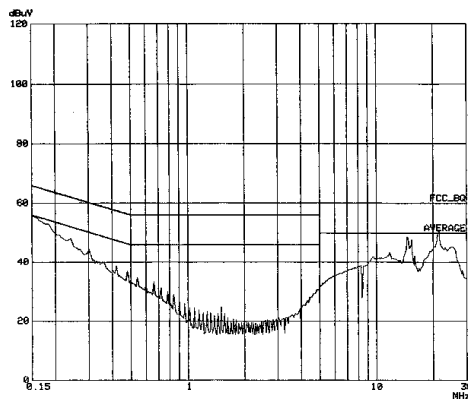
7. +5V step response



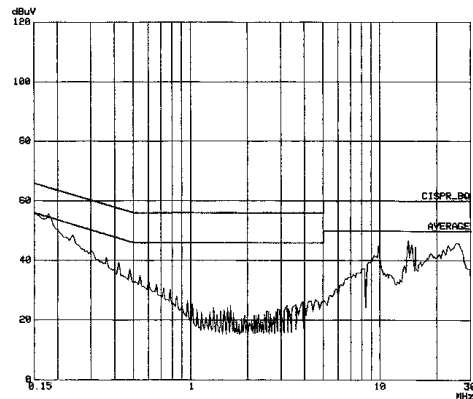
8. +12V step response



9. FCC B



10. EN 55011 B



11. Power derating curve

