



## 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-Y113   | +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%       |                    |
| SNP-Y116   | +5V         | 0A   | 20A   |      |       | +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%       |                    |

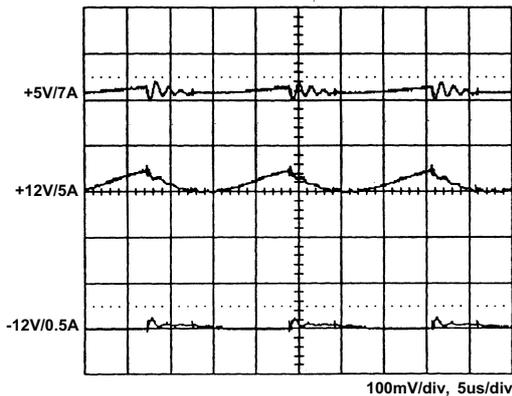
### Note:

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.

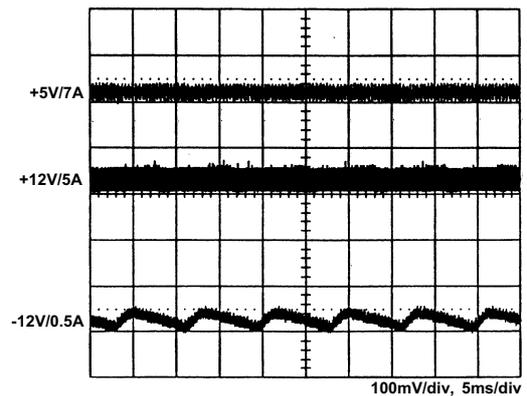
-Jim-

Performance for SNP-Y111:

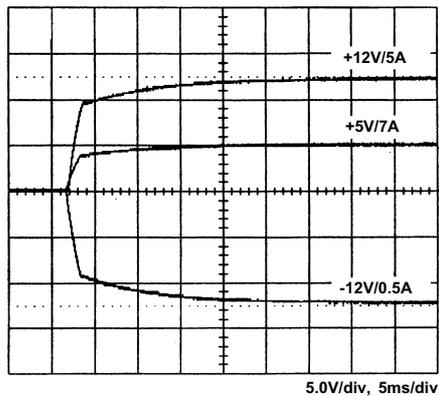
1. Switching frequency ripple



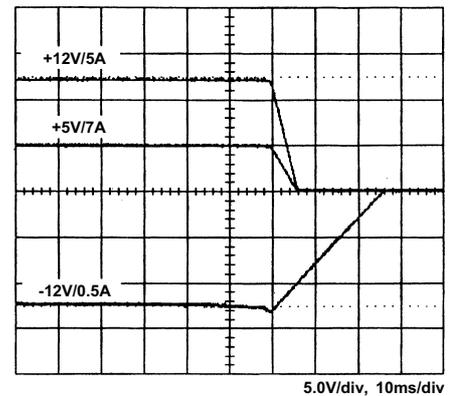
2. Line frequency ripple



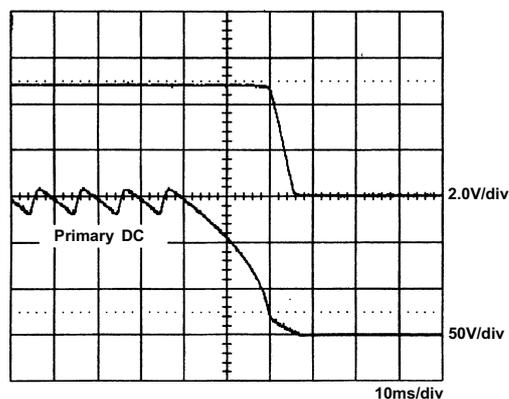
3. Output turn on wave form



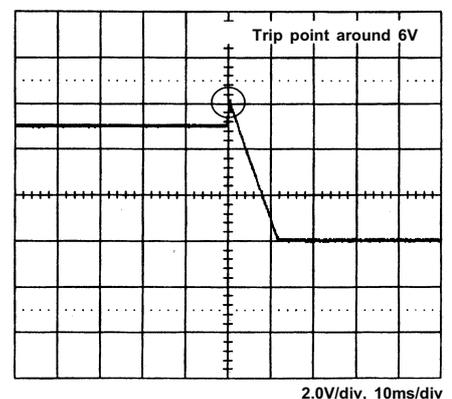
4. Output turn off wave form



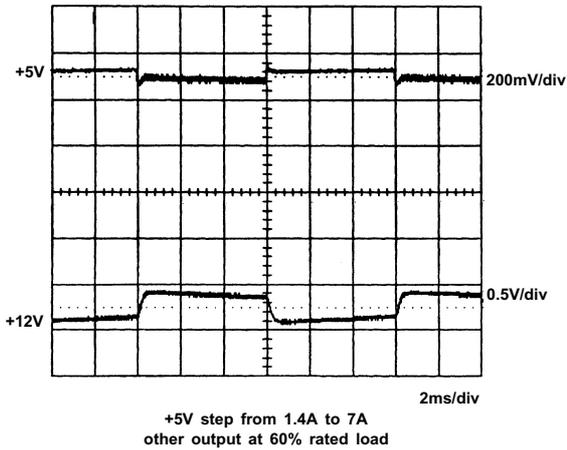
5. Hold-up time



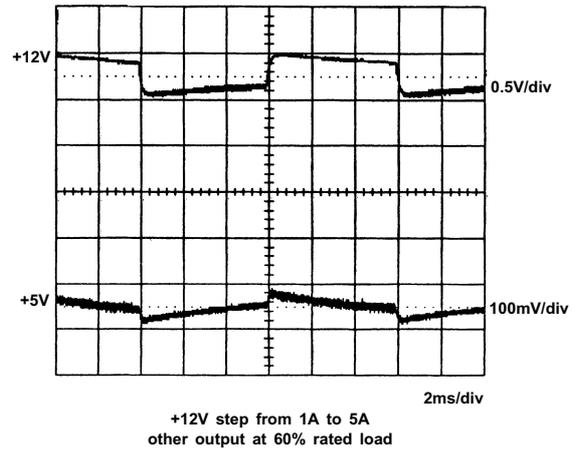
6. Over voltage protection



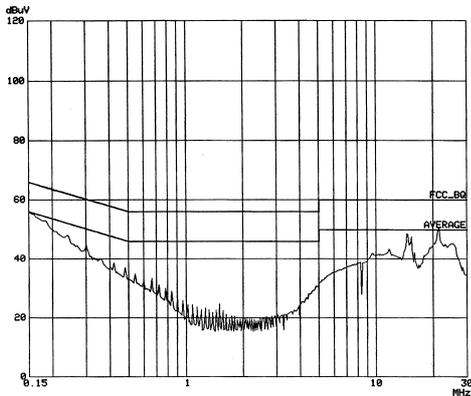
7. +5V step response



8. +12V step response



9. FCC B



10. EN 55011 B

