

#### **Features:**

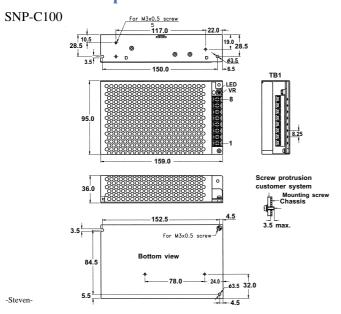
- With ITE safety
- Only 1.41 inch height
- With power good LED
- With output adjustable trimmer
- Efficiency between 75% to 85%
- Operation from 0°C to 70°C by convection

## **General Specifications:**

| Input voltage        | 85VAC to 264VAC           |
|----------------------|---------------------------|
| Input frequency      | 47Hz to 63Hz              |
| Inrush current       | less than 30A at 115VAC   |
|                      | less than 60A at 230VAC   |
|                      | cold start, 25°C          |
| Efficiency           | 78%~87% depends on models |
|                      | at rated load and 115VAC  |
| Hold up time         | 16mS typical              |
|                      | at rated load and 115VAC  |
| Over load protection | auto recovery             |
|                      |                           |

| Short circuit protection | auto recovery   |
|--------------------------|---|
| Over voltage protection  | latch off   |
| Operating temperature    | 0 to 70°C convection                                      |
|                          | derating: $2.5\% / ^{\circ}\text{C} > 50^{\circ}\text{C}$ |
| Cooling                  | free air convection                                       |
| Storage temperature      | 40°C to +75°C   |
| EMI                      | FCC"B"  |
|                          | EN55022"B", EN55011"B"                                    |
| EMS                      | EN61000-4-2,-3,-4,-5,-6,-8,-11                            |
| Safety                   | UL 60950-1  |
|                          | CSA 22.2 No.234-1   |
|                          | EN 60950-1  |

## **Mechanical Specifications:**



#### **Notes:**

- Dimensions shown in mm as left. Tolerance: ±0.4mm.
- 2. Size: 95 X 159 X 36 (mm) 3.74" X 6.25" X 1.41"
- 3. Packing:
  Net weight: 610 g approx. / unit
  Gross weight: 14.4 kg approx. / carton, 20 units / carton
  Carton size (mm): 423 (L) x 306 (W) x 252 (H)
- Connectors
- AC input & DC output : Terminal Block, pitch of 8.25mm
- Output Pin assignment:

| PIN NO.  | 1    | 2    | 3     | 4    | 5    | 6    | 7   | 8   |
|----------|------|------|-------|------|------|------|-----|-----|
| SNP-C106 | AC/L | AC/N | Earth | GND  | +5V  |      |     |     |
| SNP-C107 | AC/L | AC/N | Earth | GND  | +12V |      |     |     |
| SNP-C108 | AC/L | AC/N | Earth | GND  | +15V |      |     |     |
| SNP-C109 | AC/L | AC/N | Earth | GND  | +24V |      |     |     |
| SNP-C10T | AC/L | AC/N | Earth | GND  | +48V |      |     |     |
| SNP-C103 | AC/L | AC/N | Earth | +12V | GND  | +5V  |     |     |
| SNP-C10A | AC/L | AC/N | Earth | +24V | GND  | +5V  |     |     |
| SNP-C100 | AC/L | AC/N | Earth | +12V | -5V  | +12V | GND | +5V |
| SNP-C104 | AC/L | AC/N | Earth | -15V | -5V  | +15V | GND | +5V |
| SNP-C10F | AC/L | AC/N | Earth | -12V | +24V | +12V | GND | +5V |
|          |      |      |       |      |      |      |     |     |

## **Output Specifications:**

| MODEL    | OUTPUT                      | LOAD                 |                          |                       |                 | VOLTAGE  | RIPPLE                                  | LINE                     | LOAD                     | EFFICIENCY |
|----------|-----------------------------|----------------------|--------------------------|-----------------------|-----------------|--|---|--------------------------|--------------------------|------------|
| NO.      | RAIL                        | MIN.                 | RATED                    | MAX.                  | PEAK            | ACCURACY   | NOISE                                   | REG.                     | REG.                     | TYPICAL    |
| SNP-C106 | +5V                         | 0A                   | 20A                      |                       | 30A             | +4.95V~+5.05V  | 50mVpp                                  | ±1%                      | ±1%                      | 80%        |
| SNP-C107 | +12V                        | 0A                   | 9A                       |                       | 13.5A           | +11.4V~+12.6V  | 120mVpp                                 | ±1%                      | ±1%                      | 83%        |
| SNP-C108 | +15V                        | 0A                   | 7A                       |                       | 10.5A           | +14.25V~+15.75V  | 150mVpp                                 | ±1%                      | ±1%                      | 85%        |
| SNP-C109 | +24V                        | 0A                   | 4.5A                     |                       | 6.8A            | +22.8V~+25.2V  | 240mVpp                                 | ±1%                      | ±1%                      | 85%        |
| SNP-C10T | +48V                        | 0A                   | 2.3A                     |                       | 3.4A            | +45.6V~+50.4V  | 240mVpp                                 | ±1%                      | ±1%                      | 87%        |
| SNP-C103 | +5V<br>+12V                 | 0A<br>0A             | 7A<br>2.5A               | 10A<br>3A             | 12A<br>4A       | +4.95V~+5.05V<br>+22.8V~+25.2V                                       | 50mVpp<br>480mVpp                       | ±1%<br>±1%               | ±2%<br>±2%               | 83%        |
| SNP-C10A | +5V<br>+24V                 | 0A<br>0A             | 7A<br>2.5A               | 5A<br>2A              | 6A<br>3A        | +4.95V~+5.05V<br>+22.8V~+25.2V                                       | 50mVpp<br>480mVpp                       | ±1%<br>±1%               | ±2%<br>±2%               | 83%        |
| SNP-C100 | +5V<br>+12V<br>-12V<br>-5V  | 0A<br>0A<br>0A<br>0A | 7A<br>4A<br>0.5A<br>0.5A | 10A<br>5A<br>1A<br>1A | 15A<br>7A       | +4.95V~+5.05V<br>+11.4V~+12.6V<br>-11.4V~-12.6V<br>-4.95V~-5.05V     | 50mVpp<br>120mVpp<br>120mVpp<br>50mVpp  | ±1%<br>±1%<br>±1%<br>±1% | ±3%<br>±3%<br>±3%<br>±3% | 80%        |
| SNP-C104 | +5V<br>+15V<br>-15V<br>-5V  | 0A<br>0A<br>0A<br>0A | 7A<br>3A<br>0.5A<br>0.5A | 10A<br>4A<br>1A<br>1A | 15A<br>6A       | +4.95V~+5.05V<br>+14.25V~+15.75V<br>-14.25V~-15.75V<br>-4.95V~-5.05V | 50mVpp<br>120mVpp<br>120mVpp<br>50mVpp  | ±1%<br>±1%<br>±1%<br>±1% | ±3%<br>±3%<br>±3%<br>±3% | 80%        |
| SNP-C10F | +5V<br>+12V<br>+24V<br>-12V | 0A<br>0A<br>0A<br>0A | 5A<br>2A<br>1.5A<br>0.5A | 10A<br>4A<br>2A<br>1A | 12A<br>5A<br>3A | +4.95V~+5.05V<br>+11.4V~+12.6V<br>+22.8V~+25.2V<br>-11.4V~-12.6V     | 50mVpp<br>120mVpp<br>240mVpp<br>120mVpp | ±1%<br>±1%<br>±1%<br>±1% | ±3%<br>±3%<br>±3%<br>±3% | 80%        |

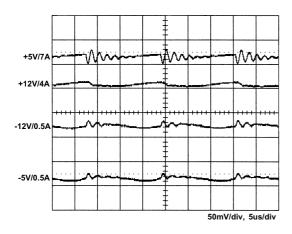
#### Note:

- 1. The max, load can be continuously provided at 50°C and convection cooling conditions. The peak load can be temporarily provided up to 8 seconds.
- 2. 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.
- 3. Line regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 5. Ripple & noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF + 10uF capacitor at rated load and nominal line.
- 6. 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.

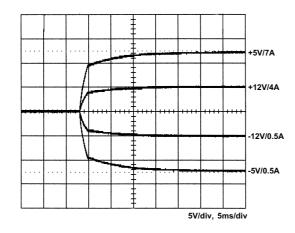
-Steven-

## **Performance for SNP-C100:**

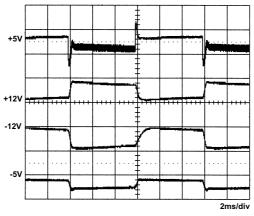
## 1. Switching frequency ripple



## 3. Output turn on wave form

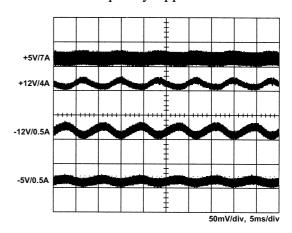


## 5. +5V step response

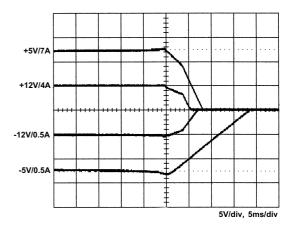


+5V step from 20% load to 100% load other outputs at 60% load

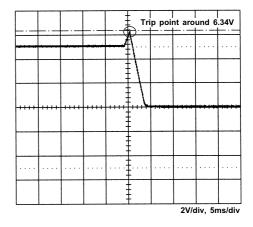
## 2. Line frequency ripple



## 4. Output turn off wave form



## 6. Over voltage protection

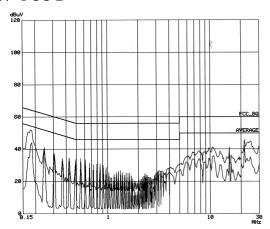


-Steven



Rated 100W Peak 150W SNP-C10 Series

#### 7. FCC B



#### 8. EN 55022 B

