

# General Purpose (Universal)



#### **Features:**

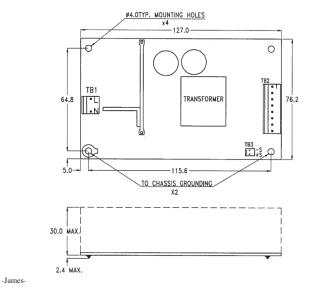
- With built-in PFC
- Only 1.26 inch height
- 4.8 Watt per cubic inch
- With ITE safety
- Efficiency between 80% to 90%
- Operation from 0°C to 70°C by convection

### **General Specifications:**

Input voltage
Input frequency 47 Hz to 63 Hz
Inrush current less than 30A at 115VAC
less than 60A at 230VAC
cold start, 25°C
Efficiency
Hold up time20mS typical
at rated load and 115VAC
Over load protectionauto recovery
Short circuit protectionauto recovery
Over voltage protectionlatch off

### **Mechanical Specifications:**

#### SNP-Z106



Max. capacitive loadSNP-Z106 / 30000uF SNP-Z107 / 10000uF, SNP-Z109 / 2700uF
Remote Sense compensates for 0.5V load drop min.
Operating temperature (open frame type)0°C to 70°C
derating: 2.5% / °C > 50°C
Cooling free air convection for 100W
with 18CFM forced air flow for 130W
Storage temperature20°C to +85°C
EMI EN55022 "B", FCC "B"
Harmonics EN61000-3-2
EMS EN61000-4-2,-3,-4,-5,-6,-11
Safety UL 60950-1
CSA C22.2 No. 60950-1, TUV EN60950-1

#### Notes:

- 1. Dimensions shown in mm as left.
- Tolerance: +/-0.4mm.
- 2. Size:
- 2.1 SNP-Z106, Z107, Z108, Z109, Z10T, Z10B 127.0 X 76.2 X 30 (mm) 5" X 3" X 1.18"
- 2.2 SNP-Z101, Z103, Z10D 127.0 X 76.2 X 32 (mm) 5" X 3" X 1.26"
- Packing: Net weight: 310 g approx. / unit Gross weight: 17 kg approx. / carton, 48 units / carton Carton size (mm): 397 (L) x 339 (W) x 327 (H)
- 4. Connectors: AC input : Molex 5277-02A or equivalent DC output : Molex 5273 or equivalent Remote Sense : Molex 5045-02A or equivalent (for SNP-Z10X, X=6, 7, 8, 9, B, T) Fan Output : Molex 5045-02A or equivalent (for SNP-Z101, SNP-Z10D)



### **Output Specifications:**

MODEL	OUTPUT	LOAD			VOLTAGE	RIPPLE	LINE	LOAD
NO.	RAIL	MIN.	RATED	MAX.	ACCURACY	NOISE	REG.	REG.
SNP-Z106	+5V	0A	20A	26A	+4.95V~+5.05V	50mVpp	±0.5%	±1%
SNP-Z107	+12V	0A	9A	10.8A	+11.90V~+12.10V	120mVpp	±0.5%	±1%
SNP-Z108	+15V	0A	7A	8.7A	+14.90V~+15.10V	120mVpp	±0.5%	±1%
SNP-Z109	+24V	0A	4.5A	5.4A	+23.80V~+24.20V	200mVpp	±0.5%	±1%
SNP-Z10T	+48V	0A	2.3A	2.7A	+47.60V~+48.40V	200mVpp	±0.5%	±1%
SNP-Z101	+5V	0A	11.5A	15A	+4.95V~+5.05V	50mVpp	±0.5%	±1%
	+12V	0A	3A	5A	+11.40V~+12.60V	100mVpp	±0.5%	±5%
	-12V	0A	0.5A	0.5A	-11.40V~-12.60V	100mVpp	±0.5%	±5%
SNP-Z103*	+5V	0A	7A	10A	+4.95V~+5.05V	50mVpp	±0.5%	±1%
	+12V	0A	8A	10A	+11.40V~+13.20V	120mVpp	±0.5%	±5%
SNP-Z10D	+3.3V	0A	10A	15A	+3.20V~+3.40V	50mVpp	±0.5%	±1%
	+5V	0A	8A	10A	+4.75V~+5.25V	50mVpp	±0.5%	±5%
	+12V	0A	0.5A	0.5A	+11.40V~+12.60V	100mVpp	±0.5%	±5%
SNP-Z10B	+3.3V	0A	25A	30A	+3.20 ~+3.40V	50mVpp	±0.5%	±1%

\* SNP-Z103: Convection cooling : 100W Forced air with 18CFM : 130W

#### Note:

1. The total output current is rated load with free air convection and max. load with 18CFM of forced air flow over the unit.

2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.

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 capacitor and a 47uF electrolytic 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 drops down to low limit of main output at rated load and nominal line.

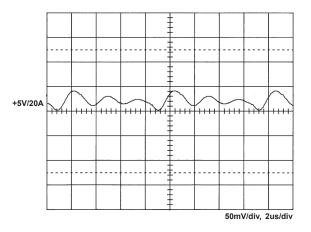
7. Efficiency is measured at rated load and nominal line.

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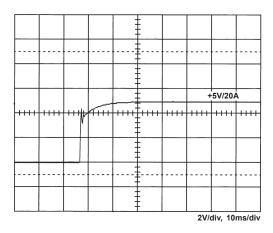


### **Performance for SNP-Z106:**

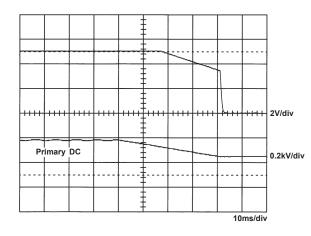
1. Switching frequency ripple



3. Output turn on wave form

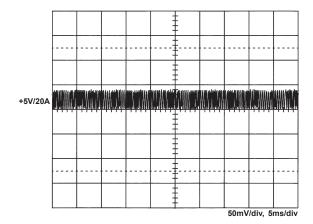


5. Hold-up time

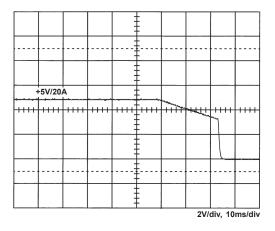


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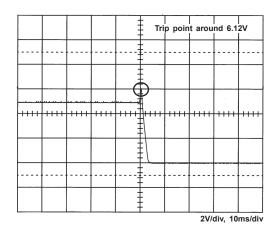
2. Line frequency ripple



4. Output turn off wave form



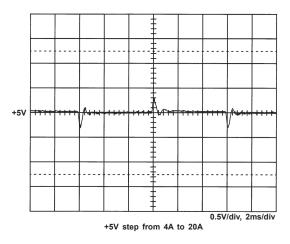
6. Over voltage protection



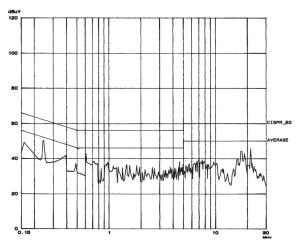


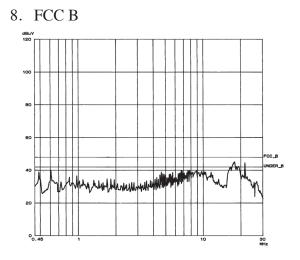
## PFC + 100W SNP-Z10 Series

7. +5V step response

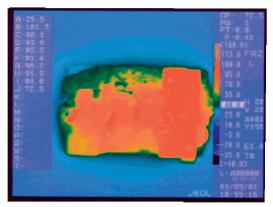


9. EN55022 B





10. Thermal profile



Test condition: M/N : SNP-Z106, Input : 104V Output : 5V/20A, Ambient : 25.5°C