



4.2" x 8" x 1.5"

General Specifications:

Input voltage 90 VAC to 264 VAC
 Input frequency 47 Hz to 63 Hz
 Inrush current < 30A at 115VAC
 (cold start at 25°C) or < 60A at 230VAC
 Efficiency 80%~85% depends on models
 Hold up time > 20 ms
 at rated load and 115VAC
 Over load protection auto recovery
 Short circuit protection..... auto recovery
 Over voltage protection latch off

Features:

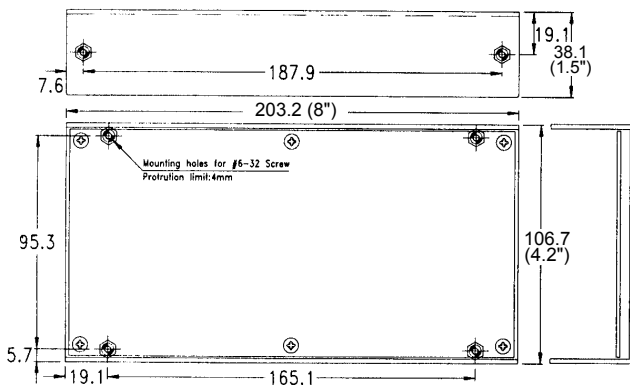
- With built-in PFC
- Only 1.5 inch height
- 4.0 Watt per cubic inch
- With ITE safety only
- Efficiency between 80% to 85%
- Operation from 0°C to 70°C by convection
- SNP-Z207-M, SNP-Z209-M for Medical only

Applications:

- For dental, laboratory products, pumps, monitors, sleep apnea devices and many other uses.

Operating temperature (open frame type) 0°C to 70°C
 derating: 2.5% / °C > 50°C
 Cooling 200W free air convection
 250W 18CFM forced air
 Storage temperature -20°C to +85°C
 EMI EN55022 "B"
 Harmonics..... EN61000-3-2 class D
 EMS..... EN61000-4-2,-3,-4,-5,-6,-11
 Safety UL 60950, UL 60601-1
 CSA C22.2 No. 234 & 60601-1
 TUV EN60950-1 & 60601-1

Mechanical Specifications:



Notes:

1. Size:
4.2" x 8.0" x 1.5"
2. Mounting Hole:
95.3 x 165.1 (mm)
3. Connectors:
AC input : Terminal blocks
DC output: Terminal blocks
Fan, Remote sense, LED:
Molex 5045-02A or equivalent
Output Pin assignment:

PIN NO.	1	2	3	4	5	6	7	8
SNP-Z201*	+5V	+5V	GND1	GND1	GND1	+12VA	GND2	+12VB
Other Models	+V	+V	+V	GND	GND	GND		

4. Packing:
Net weight: 740 g approx. / unit
Gross weight: 14 kg approx. / carton, 16 units / carton
Carton size (mm): 426 (L) x 313 (W) x 267 (H)

Output Specifications:

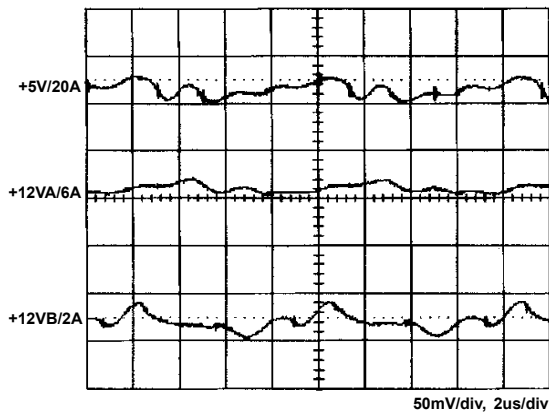
MODEL NO.	OUTPUT RAIL	LOAD				VOLTAGE ACCURACY	RIPPL NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	MAX.	PEAK				
SNP-Z201	+5V	2A	20A	25A		+4.95V~+5.05V	50mVpp	±1%	±1%
	+12VA	0A	6A	8A		+11.4V~+12.60V	120mVpp	±1%	±1%
	+12VB	0A	2A	3A		+11.4V~+12.60V	120mVpp	±1%	±5%
SNP-Z207	+12V	0A	17A	21A		+11.40V~+12.60V	100mVpp	±1%	±1%
SNP-Z207-M	+12V	0A	17A	21A		+11.40V~+12.60V	100mVpp	±1%	±1%
SNP-Z208	+15V	0A	13.5A	17A		+14.25V~+15.75V	100mVpp	±1%	±1%
SNP-Z205	+18V	0A	11.3A	14A		+17.1V~+18.9V	150mVpp	±1%	±1%
SNP-Z209	+24V	0A	8.5A	10.5A		+23.80V~+24.20V	100mVpp	±1%	±1%
SNP-Z209-M	+24V	0A	8.5A	10.5A		+23.80V~+24.20V	100mVpp	±1%	±1%
SNP-Z20T	+48V	0A	4.3A	5.2A		+45.60V~+50.40V	100mVpp	±1%	±1%

Note:

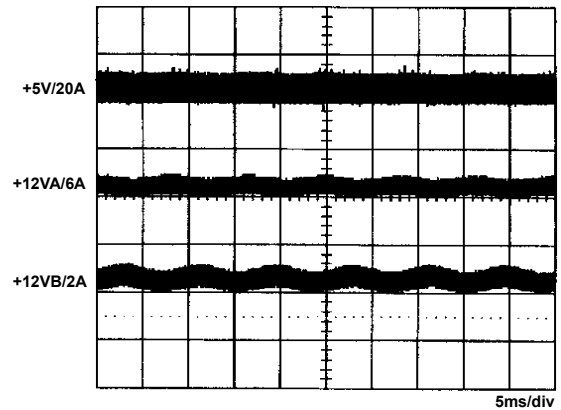
- Each output can provide up to max load separately when the power supply starts up. To exceed the max. output power continuously is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
- Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 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.
- 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.
- Efficiency is measured at rated load and nominal line.
- +12VB is floating.
- Model Selection:
SNP-Z20x is for ITE application.
SNP-Z207-M and SNP-Z209-M are for medical application.

Performance for SNP-Z201:

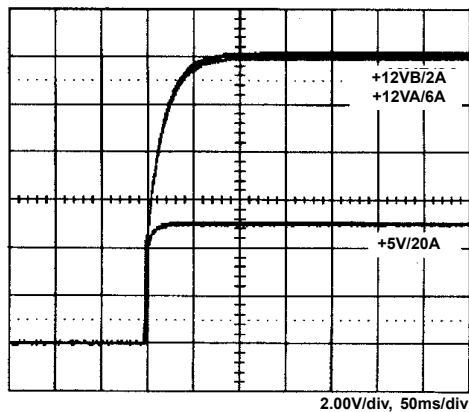
1. Switching frequency ripple



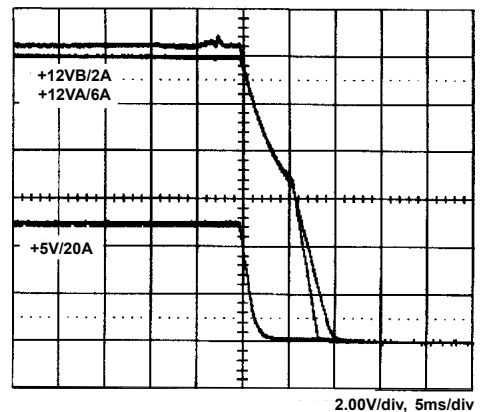
2. Line frequency ripple



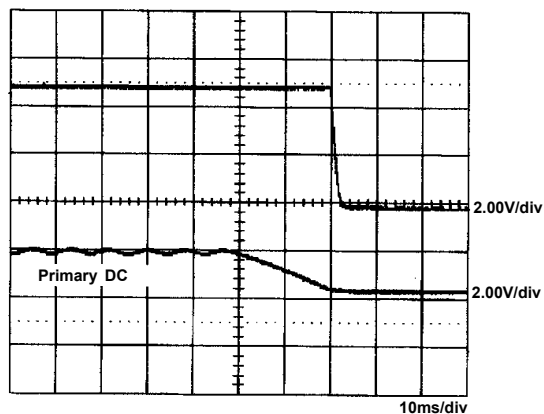
3. Output turn on wave form



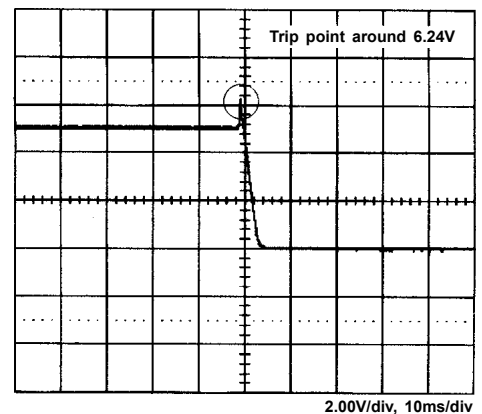
4. Output turn off wave form



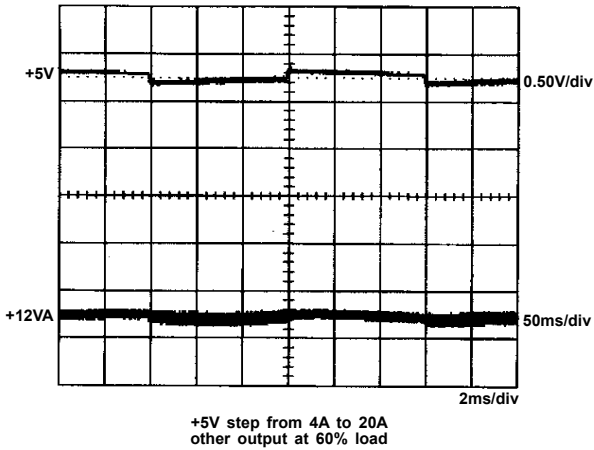
5. Hold-up time



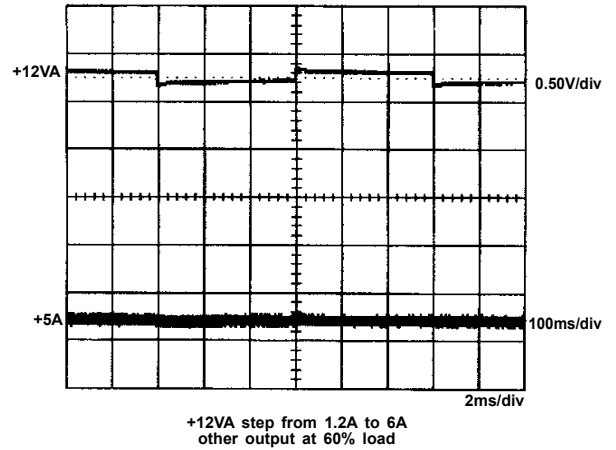
6. Over voltage protection



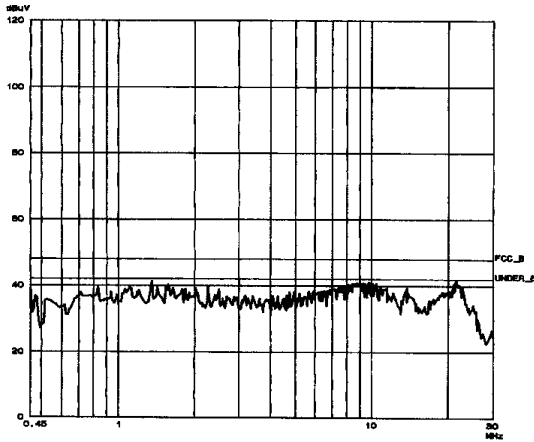
7. +5V step response



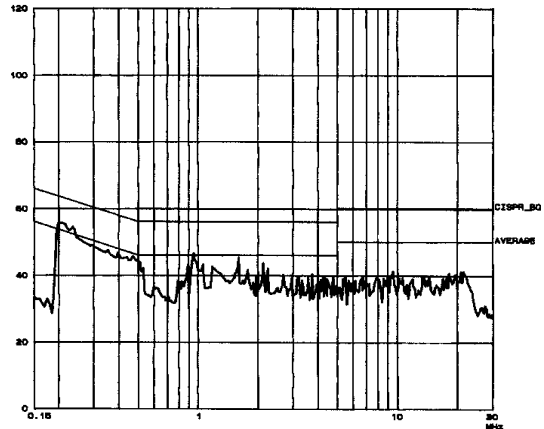
8. +12V step response



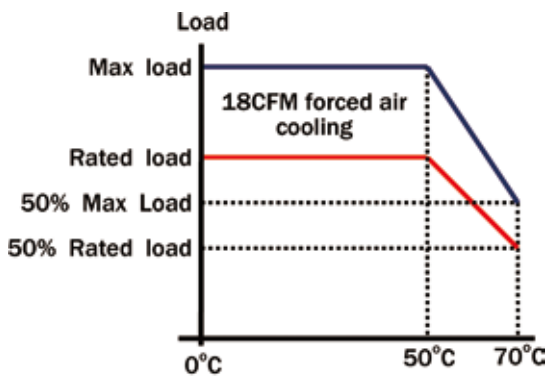
9. FCC B



10. CISPR 22 B



11. Power derating curve



12. Max. load fan location

