



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:

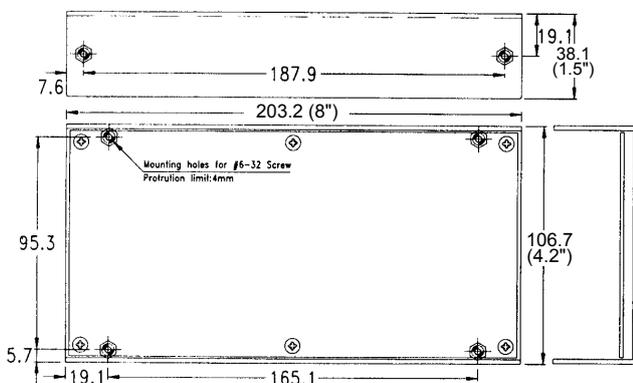
- With built-in PFC
- Only 1.5 inch height
- 4.0 Watt per cubic inch
- With ITE safety only
- Efficiency between 80% to 85%
- Operation from 0°C to 70°C by convection
- SNP-Z207-M, SNP-Z209-M for Medical only

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
 EN62368-1

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
4. 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:

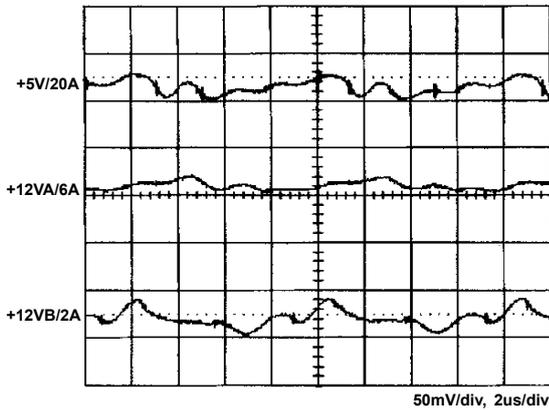
| MODEL NO. | OUTPUT RAIL | LOAD | | | | VOLTAGE ACCURACY | RIPPL NOISE | LINE REG. | LOAD REG. |
|------------|-------------|------|-------|-------|------|------------------|-------------|-----------|-----------|
| | | MIN. | RATED | MAX. | PEAK | | | | |
| SNP-Z201 | +5V | 2A | 20A | 25A | | +4.95V~+5.05V | 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:

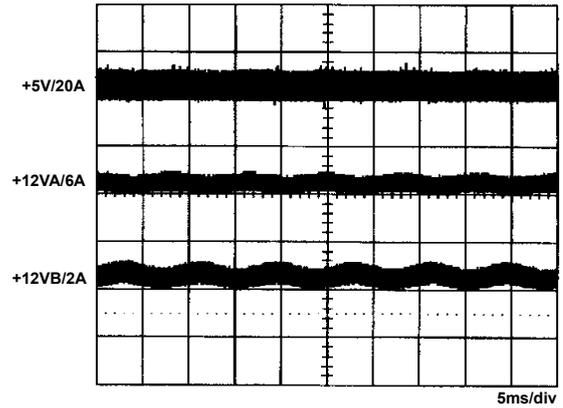
- Each output can provide up to max load separately when the power supply starts up. To exceed the max. output power continuously is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing ±10% of input voltage 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:

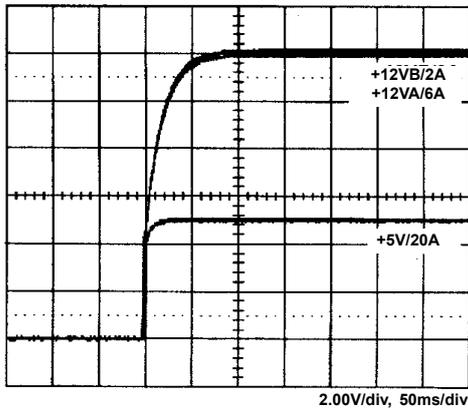
1. Switching frequency ripple



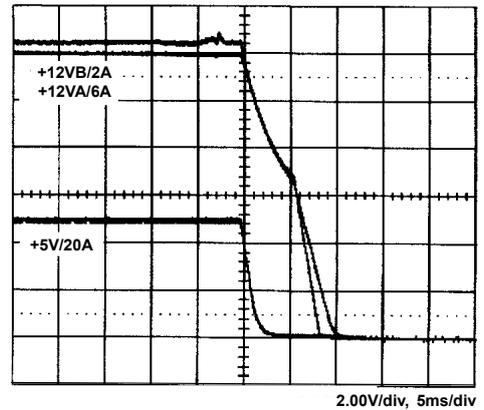
2. Line frequency ripple



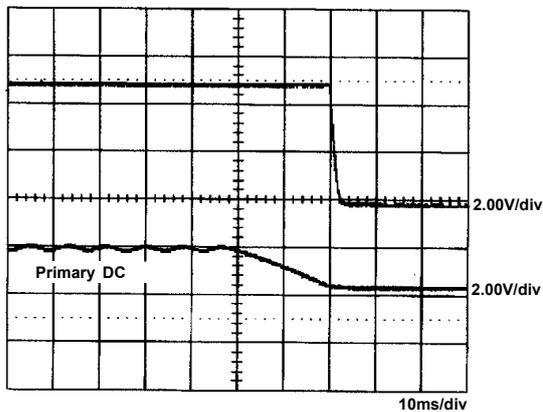
3. Output turn on wave form



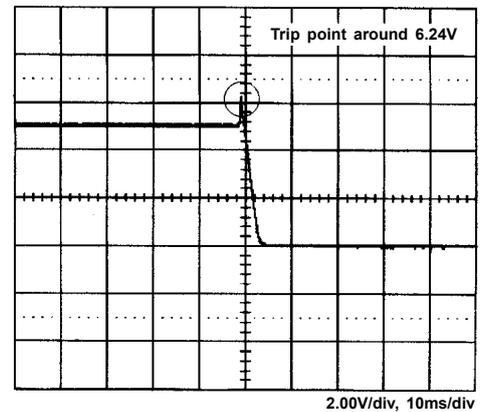
4. Output turn off wave form



5. Hold-up time

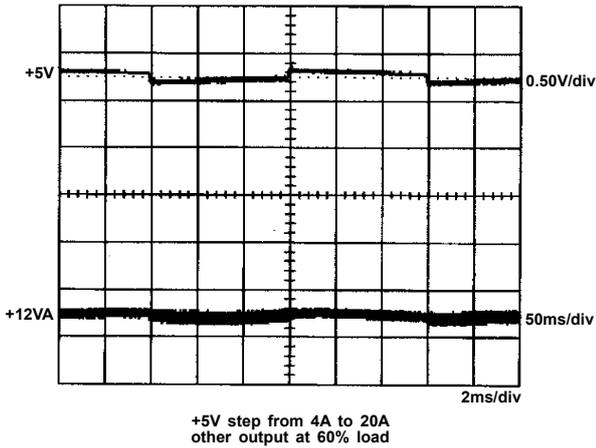


6. Over voltage protection

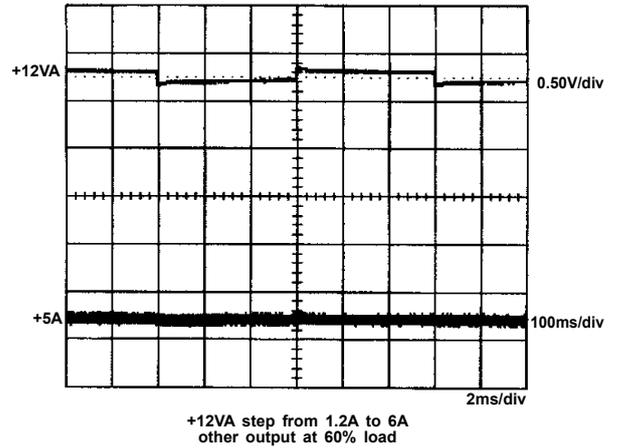


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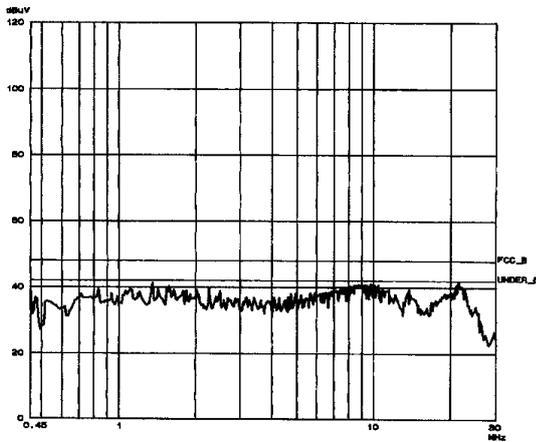
7. +5V step response



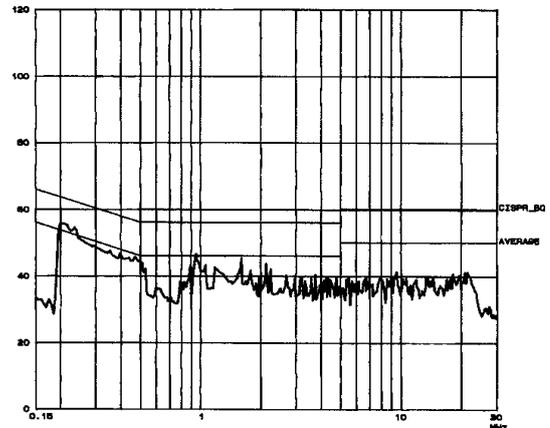
8. +12V step response



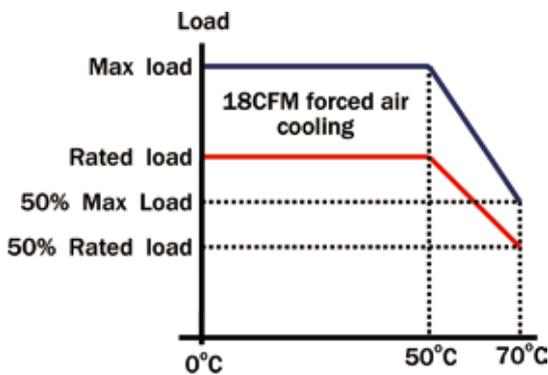
9. FCC B



10. CISPR 22 B



11. Power derating curve



12. Max. load fan location

