

Description:

SNP-902 series is a 20W, universal input switching mode power supply. It is with various output options, which includes triple outputs, dual outputs and single output. Model number with "-1" is designed with EMI VDE B.

Model available:

- SNP-9021 / SNP-9021-1 for 5V/1A, 12V/1A, -12V/0.3A
- SNP-9026 / SNP-9026-1 for 5V/4A
- SNP-9027 / SNP-9027-1 for 12V/2A
- SNP-9029 / SNP-9029-1 for 24V/1A
- SNP-902T for 48V/0.5A

General Specifications:

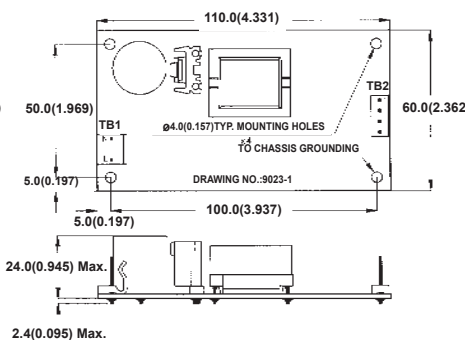
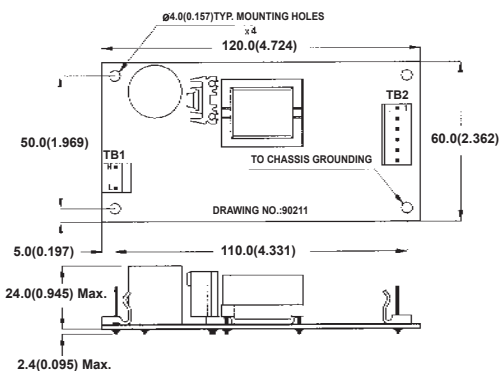
Input voltage 85VAC to 270VAC
 Input frequency 47Hz to 63Hz
 Inrush current less than 30A at 115VAC
 (Cold start) less than 60A at 230VAC
 Efficiency higher than 70%
 at rated load and 115VAC
 Hold up time longer than 16ms
 at rated load and 115VAC
 Over load protection auto recovery

Short circuit protection auto recovery
 Over voltage protection crowbar
 Operating temperature 0°C to 50°C
 Cooling free air convection
 Storage temperature -40°C to +85°C
 EMI conduction standard FCC class "B"
 & VDE class "B" for SNP-902X-1
 Safety meet UL 60950-1
 CSA C22.2 No.60950-1
 EN 60950-1

Mechanical Specifications:

SNP-9021-1

SNP-9026, -9027, -9029, 902T



Notes:

1. Dimensions shown in mm (inch) as left. Tolerance specified is ± 0.4mm.
2. Size:
 For SNP-9021:
 60 X 120 X 24 (mm)
 2.362" X 4.724" X 0.945"
 For SNP-9026, -9027, -9029, -902T:
 60 X 110 X 24 (mm)
 2.362" X 4.331" X 0.945"
3. Mounting holes:
 For SNP-9021:
 50 X 110 (mm)
 1.969" X 4.331"
 For SNP-9026, -9027, -9029, -902T:
 50 X 100 (mm)
 1.969" X 3.937"
4. Packing:
 Net weight: 130 g approx. / unit
 Gross weight: 12.5 kg approx. / carton
 80 units / carton
 Carton size (mm):437 (L) x 357 (W) x 313 (H)

5. Connectors:

TB1 - AC input : Molex 5277-2 or equivalent
 TB2 - DC output : Molex 5273-6 or equivalent for SNP-9021(-1)
 Molex 5273-4 or equivalent for SNP-9026(-1),
 -9027(-1), -9029(-1), -902T

TB2 Pin Assignment:

PIN NO.	1	2	3	4	5	6
SNP-9021(-1)	+5V	+5V	GND	GND	-12V	+12V
SNP-9026(-1)	+5V	+5V	GND	GND		
SNP-9027(-1)	+12V	+12V	GND	GND		
SNP-9029(-1)	+24V	+24V	GND	GND		
SNP-902T	+48V	+48V	GND	GND		

Output Specifications:

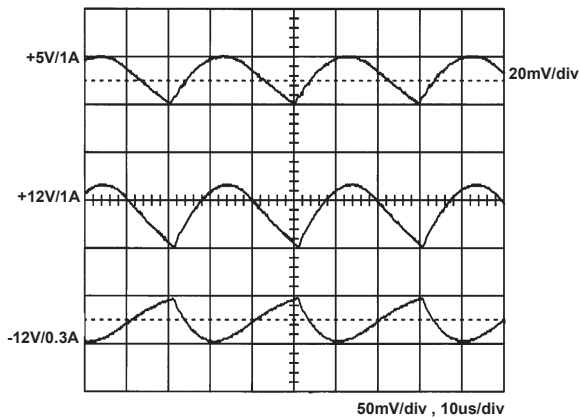
MODEL NO.	OUTPUT RAIL	LOAD			VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
		MIN.	RATED	PEAK				
SNP-9021 (-1)	+5V	0A	1A	3A	+4.95~+5.05V	1%	±1%	±1%
	+12V	0A	1A	1.5A	+11.8~+12.5V	1%	±1%	±4%
	-12V	0A	0.3A	0.5A	-12.0~-13.0V	1%	±1%	±4%
SNP-9026 (-1)	+5V	0A	4A	5A	+4.95~+5.05V	1%	±1%	±1%
SNP-9027 (-1)	+12V	0A	2A	3A	+11.88~+12.12V	1%	±1%	±1%
SNP-9029 (-1)	+24V	0A	1A	1.5A	+23.76~+24.24V	1%	±1%	±1%
SNP-902T	+48V	0A	0.5A		+47.0~+49.0V	1%	±1%	±1%

Note:

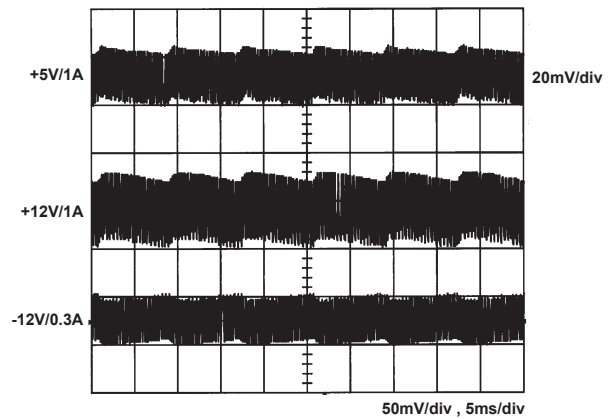
- Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
- At factory, all outputs in 60% rated load condition, each output is checked to be within the accuracy range while the main output is setting to within the specified accuracy range at rated load.
- 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 drop down to regulation limit at rated load and nominal line.
- Rated load is maximum loading for flat mounting and free air convection cooling.

Performance for SNP-9021-1:

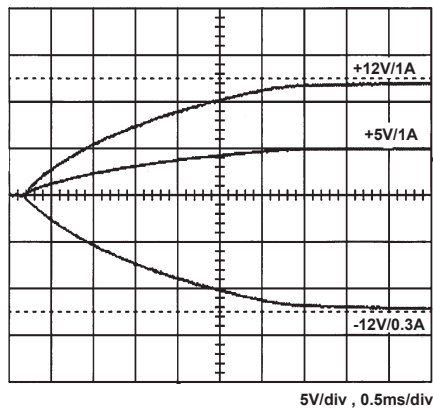
1. Switching frequency ripple



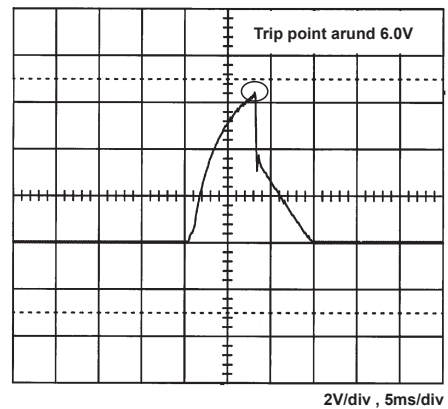
2. Line frequency ripple



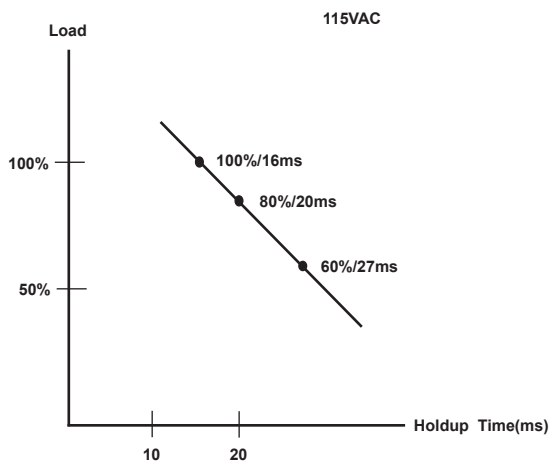
3. Output turn on wave form



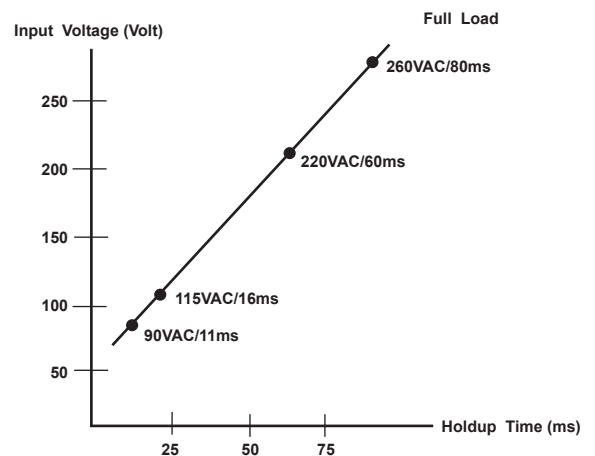
4. Over voltage protection



5. Hold-up time with loading

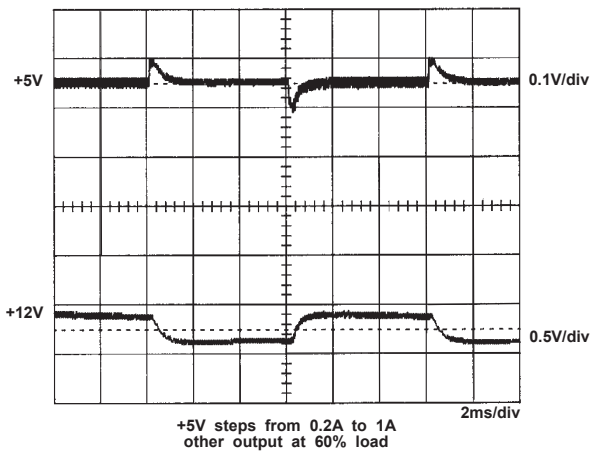


6. Hold-up time with line

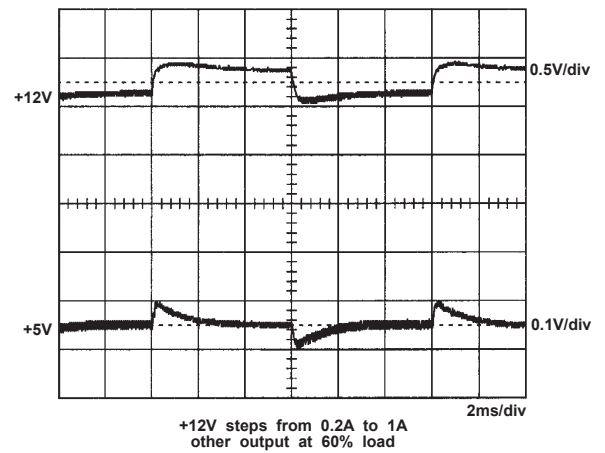


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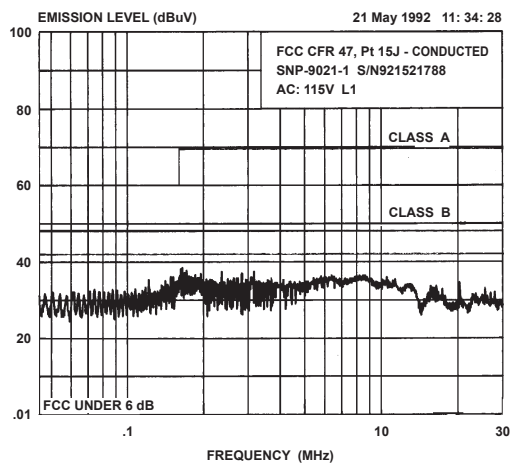
7. +5V step response



8. +12V step response



9. FCC B



10. VDE B

