THE RELIABLE SOURCE

Medical & ITE
General Purpose

Rated 160W
Max. 240W
Peak 320W
SNP-G16x-C Series



3.3" x 5" x 1.7"

Features:

- Peak load (1.4 ~ 2 x rated current, Vo=rated for 5 sec)
- Design for BF application
- Convection cooling for Rated power
- Built-in PFC and 12V output for fan, available for G12x, G16x, and G20x
- EMI class B
- -20°C to +70°C operating temperature

Applications:

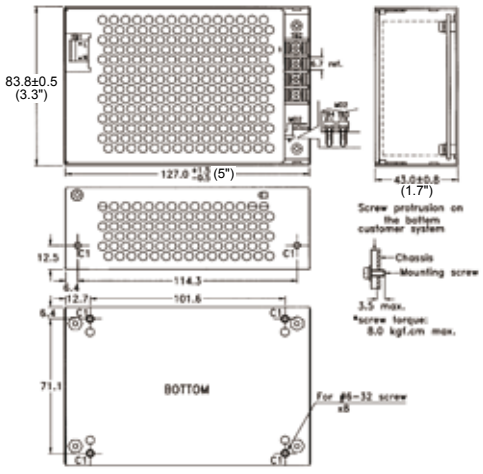
- For peak load and surge load applications, such as motor drive, coffee machine, vending machine, gaming machine, and other industrials.
- For EMI class B application, such as home healthcare device, and other medical devices.

General Specifications:

Input voltage ..... 90 VAC to 264 VAC
Input frequency ..... 47 Hz to 63 Hz
Inrush current ..... < 30/60A at 115/230VAC
Hold up time ..... 20ms typical
Over load/Short circuit protection ..... auto recovery
Over voltage protection ..... latch off
Operating temperature ..... -20°C to 70°C
derating: 2.5% / °C > 50°C for convection cooling
Storage temperature ..... -40°C to +85°C

EMI ..... EN55022 "B", EN61000-3-3
Harmonics ..... EN61000-3-2, class D
EMS EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety ..... UL/CSA/EN60950-1, 2nd edition
ANSI/AMMI/CSA/EN60601-1, 3.1 edition
CB report, CE mark, RM report/file
Energy Saving (for w/o -A suffix) ..... ENERGY STAR
for computers version 6.0
for displays version 6.0
ErP regulation EC(No) 1275/2008

Mechanical Specifications:



Notes:

1. Size: Fits 1U Height
   3.3" x 5" x 1.7"
2. Mounting Hole:
   Side edge: 12.5 x 114.3 (mm)
   Bottom : 71.1 x 101.6 (mm)
3. Connectors:
   AC input: Molex 5277-02A or equivalent
   DC output: Terminal blocks (default for SNP-G167-C) or Molex 5273-08A (default for others) or equivalent
   Fan, Remote sense: Molex 5045-02A or equivalent
4. Output Pin assignment:

Pin No.	1	2	3	4	5	6	7	8
SNP-G167-C	+Vo	+Vo	GND	GND				
OTHER MODELS	+Vo	+Vo	+Vo	+Vo	GND	GND	GND	GND

Function Pin assignment:

Pin \ Function	TB3 FAN Output	TB4 Remote Sense
1	GND	Sense -
2	+12V	Sense +

5. Packing:
   Net weight: 539 g approx. / unit
   Gross weight: 16.3 kg approx. / carton, 24 units / carton
   Carton size (mm): 384 (L) x 339 (W) x 327 (H)

-Jim-

10 years Warranty (contact Skynet's Distributors for details)

Output Specifications:

MODEL NO.	OUTPUT RAIL	LOAD				INITIAL ACCURACY	STEP EFFICIENCY			AVERAGE EFFICIENCY
		MIN.	RATED	MAX.	PEAK		@ 20% LOAD	@ 50% LOAD	@ 100% LOAD	
SNP-G167 -C SNP-G167 -CA SNP-G167 -CM SNP-G167 -C5	+12V	0A	13.3A	20A	26.6A	+11.9V~+12.1V	80%	88%	89%	85.5%
SNP-G168 -C SNP-G168 -CA SNP-G168 -CM SNP-G168 -C5	+15V	0A	10.66A	16A	21.3A	+14.9V~+15.1V	80%	88%	89%	85.5%
SNP-G165 -C SNP-G165 -CA SNP-G165 -CM SNP-G165 -C5	+18V	0A	8.88A	13.33A	17.8A	+17.9V~+18.1V	80%	88%	89%	85.6%
SNP-G169 -C SNP-G169 -CA SNP-G169 -CM SNP-G169 -C5	+24V	0A	6.66A	10A	13.3A	+23.9V~+24.1V	80%	87%	89%	85.3%
SNP-G16G-C SNP-G16G-CA SNP-G16G-CM SNP-G16G-C5	+28V	0A	5.7A	8.55A	11.4A	+27.9V~+28.1V	80%	90%	90%	86.6%
SNP-G16J -C SNP-G16J -CA SNP-G16J -CM SNP-G16J -C5	+36V	0A	4.45A	6.66A	8.9A	+35.8V~+36.2V	80%	89%	89%	86%
SNP-G16T-C SNP-G16T-CA SNP-G16T-CM SNP-G16T-C5	+48V	0A	3.35A	5A	6.67A	+47.8V~+48.2V	80%	90%	90%	86.6%

Note:

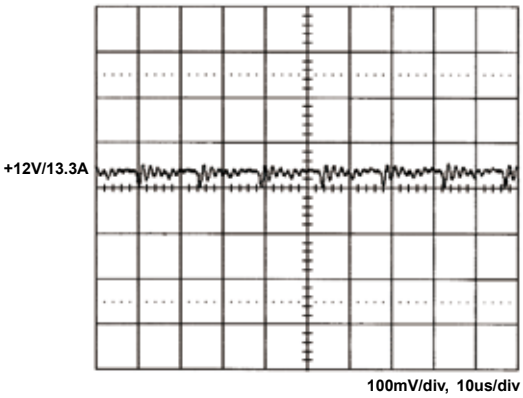
1. **Standby Power Cosumption with System:**
   For computers and displays, ENERGY STAR in U.S. and ErP regulation in Europe require the input power should be less than 0.5W at standby mode.
2. **Output Load:**
   160W for convection cooling; 240W for forced air cooling.
3. **Peak Load Duration:**
   Peak 320W can last for 5 sec.
4. **Isolation Grade:**
   Primary ⟷ Ground : 1MOPP (1500Vac)
   Primary ⟷ Secondary : 2MOPP (4000Vac)
   Secondary ⟷ Ground : 1MOPP (1500Vac)
5. **Leakage Current:**
   Earth leakage current < 300uA
   Touch current < 100uA
6. **Model Selection:**
   Most of power supplies will create audible burst sound at light load, if the application wants to meet input power < 0.5W at standby mode.
   SNP-G16x-C is for ITE application which requires standby mode.
   SNP-G16x-CA is for ITE application but without burst sound and no standby mode.
   SNP-G16x-CM is for medical application which requires standby mode.
   SNP-G16x-C5 is for medical application but without burst sound and no standby mode.

* SNP-G16x-C5, 5=MA

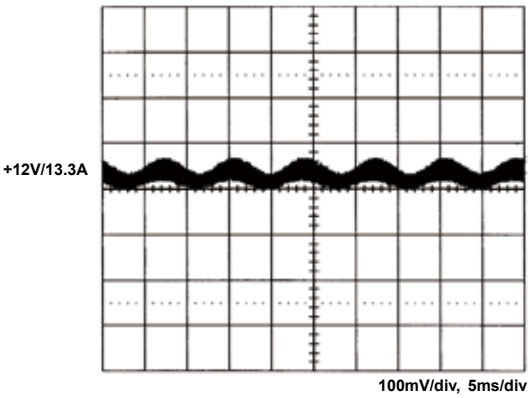
-Jim-

Performance for SNP-G167-C:

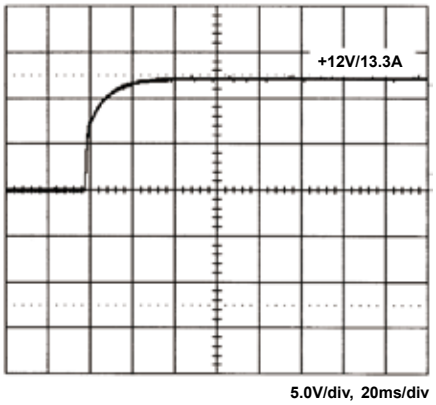
1. Switching frequency ripple



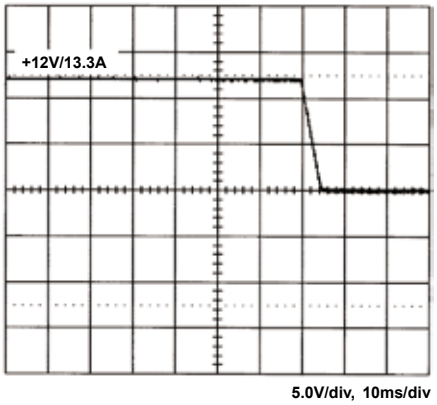
2. Line frequency ripple



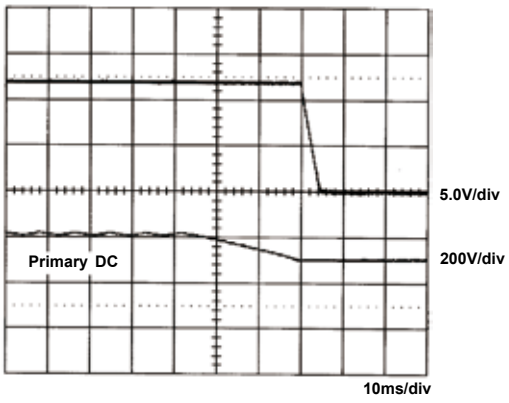
3. Output turn on wave form



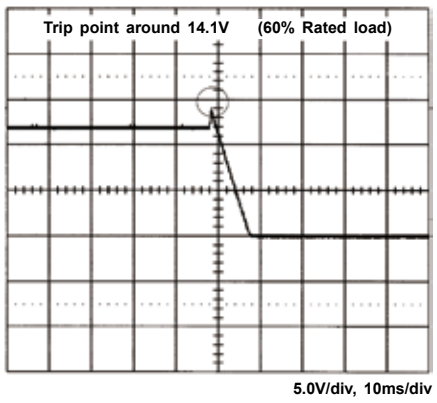
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



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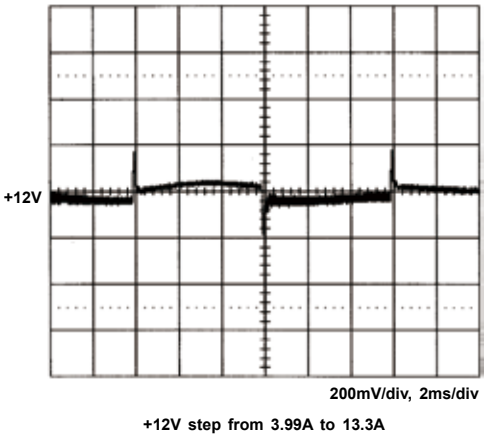
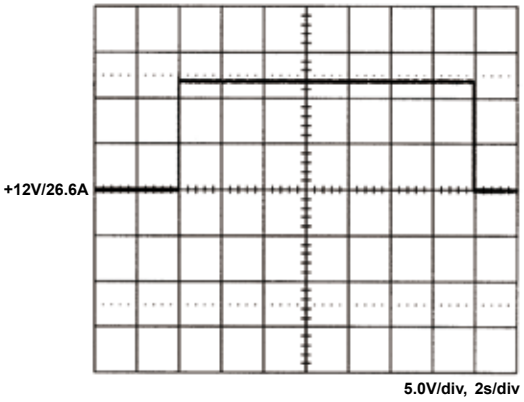
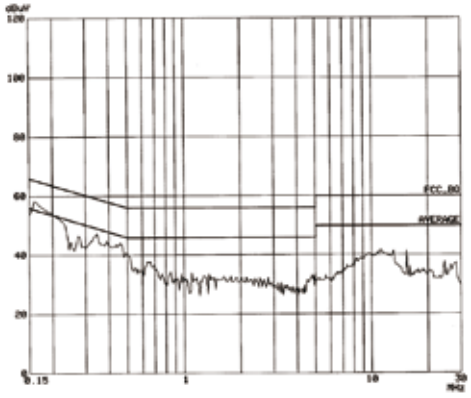
7. +12V step response



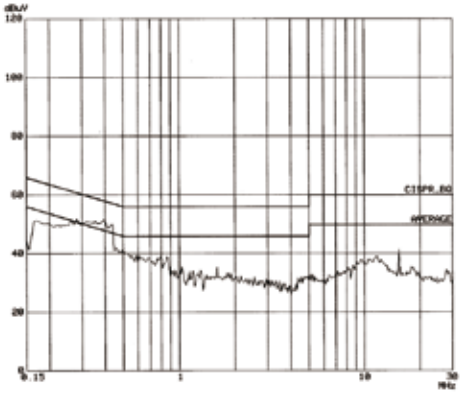
8. Peak load



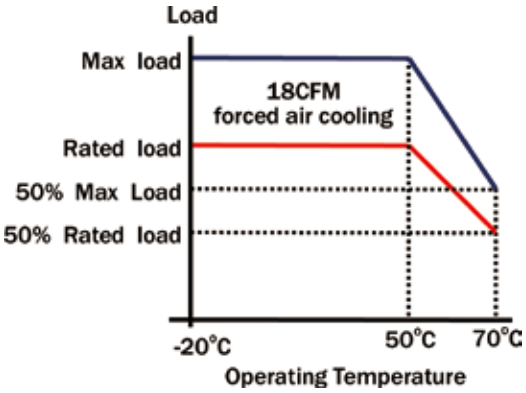
9. FCC B



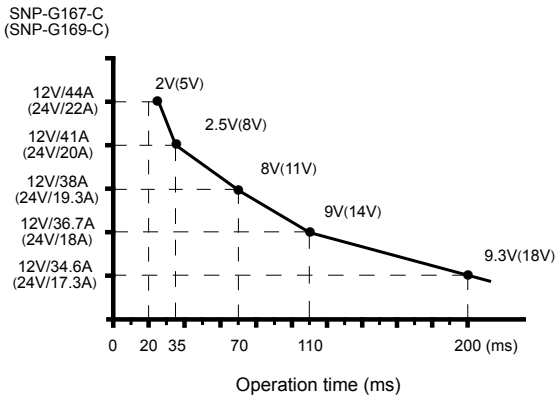
10. EN55022 B



11. Power derating curve



12. Capability for driving motor



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