

Medical & ITE

General Purpose

Rated 120W Max. 150W Peak 200W SNP-G12 Series



2" x 4.2" x 1.28"

Features:

- Peak load $(1.4 \sim 2 \text{ x rated current}, \text{Vo=rated for 5 sec})$
- 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.

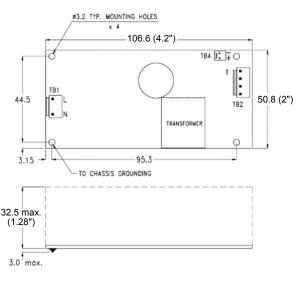
General Specifications:

| Input voltage | 90 VAC to 264 VAC |
|------------------------------------|------------------------|
| Input frequency | |
| 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 > 45 °C | for convection cooling |
| Storage temperature | 40°C to +85°C |

| EN55022 "B", EN61000-3-3 | | | | | |
|--|--|--|--|--|--|
| EN61000-3-2, class D | | | | | |
| EN61000-4-2,-3,-4,-5,-6,-8,-11 | | | | | |
| UL/CSA/EN60950-1, 2 nd edition | | | | | |
| ISI/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:

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Notes:

- . Size:
- 2" x 4.2" x 1.28"
- 2. Mounting Hole: 44.5 x 95.3 (mm)
- 3. Connectors:

AC input: JST B2P3-VH or equivalent

DC output: JST B4P--VH

Fan: Molex 5045-02A or equivalent Output Pin assignment:

1 2 3 4 GND GND Vo Vo

| | |
|-----------------|---------------|
| | TB3 |
| Function Pin | FAN Output |
| 1 | GND |
| 2 | . 12W |

Function Pin assignment:

5. Packing:

Net weight: 160 g approx. / unit Gross weight: 10 kg approx. / carton, 80 units / carton Carton size (mm): 422 (L) x 412 (W) x 287 (H)

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



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Output Specifications:

| MODEL | OUTPUT | LOAD | | | | INITIAL | STEP EFFICIENCY | | | AVERAGE |
|---|--------|------|-------|-------|-------|---------------|-----------------|------------|-------------|------------|
| NO. | RAIL | MIN. | RATED | MAX. | PEAK | ACCURACY | @ 20% LOAD | @ 50% LOAD | @ 100% LOAD | EFFICIENCY |
| SNP-G127 SNP-G127 -A SNP-G127 -M SNP-G127 -MA SNP-G127 -H | +12V | 0A | 10.0A | 12.5A | 16.6A | +11.9V~+12.1V | 82% | 89% | 90% | 86.5% |
| SNP-G128 SNP-G128 -A SNP-G128 -M SNP-G128 -MA | +15V | 0A | 8.0A | 10.0A | 13.4A | +14.9V~+15.1V | 82% | 89% | 90% | 86.5% |
| SNP-G125 SNP-G125 -A SNP-G125 -M SNP-G125 -MA | +18V | 0A | 6.6A | 8.3A | 11.1A | +17.9V~+18.1V | 82% | 89% | 90% | 86.5% |
| SNP-G129 SNP-G129 -A SNP-G129 -M SNP-G129 -MA SNP-G129 -H | +24V | 0A | 5A | 6.3A | 8.3A | +23.8V~+24.2V | 83.5% | 90% | 90.5% | 88% |
| SNP-G12G SNP-G12G-A SNP-G12G-M SNP-G12G-MA | +28V | 0A | 4.3A | 5.4A | 7.2A | +27.9V~+28.1V | 83.5% | 90% | 90.5% | 88% |
| SNP-G12J SNP-G12J -A SNP-G12J -M SNP-G12J -MA | +36V | 0A | 3.4A | 4.2A | 5.6A | +35.8V~+36.2V | 83.5% | 90% | 90.5% | 88% |
| SNP-G12T SNP-G12T-A SNP-G12T-M SNP-G12T-M SNP-G12T-H | +48V | 0A | 2.5A | 3.1A | 4.2A | +47.8V~+48.2V | 83.5% | 90% | 90.5% | 88% |

Note:

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.

Output Load:

120. W for convection cooling; 150W for forced air cooling. **Peak Load Duration:**

Peak 200W can last for 5 sec.

Isolation Grade:

 $\begin{array}{lll} & \text{Primary} & \longleftrightarrow & \text{Ground} & : 1\text{MOPP} (1500\text{Vac}) \\ & \text{Primary} & \longleftrightarrow & \text{Secondary} & : 2\text{MOPP} (4000\text{Vac}) \\ & \text{Secondary} & \longleftrightarrow & \text{Ground} & : 1\text{MOPP} (1500\text{Vac}) \\ \end{array}$

Leakage Current:

Earth leakage current < 300uA Touch current < 100uA

EMI Grounding: If there is a metal sheet under the power supply, connect the EMI ground to the metal sheet.

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-G12x is for ITE application which requires standby mode.

SNP-G12x-A is for ITE application which requires standby mode. SNP-G12x-A is for ITE application but without burst sound and no standby mode. SNP-G12x-M is for medical application which requires standby mode. SNP-G12x-H is for Home Healthcare application, input class II.

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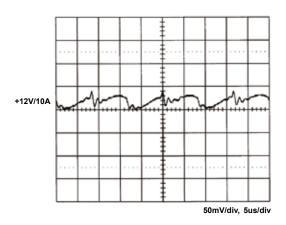


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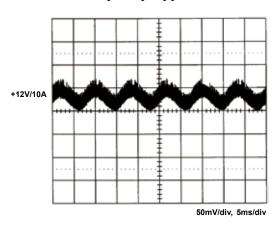
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Performance for SNP-G127:

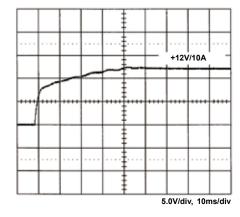
1. Switching frequency ripple



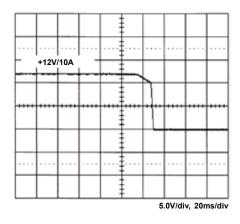
2. Line frequency ripple



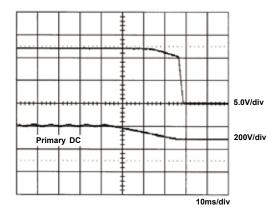
3. Output turn on wave form



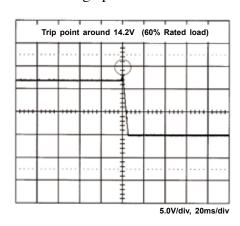
4. Output turn off wave form



5. Hold-up time



6. Over voltage protection



-Jim-

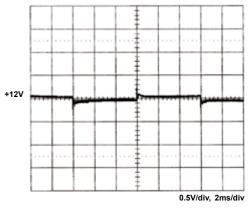


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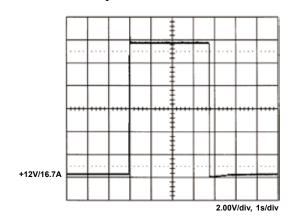
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7. +12V step response

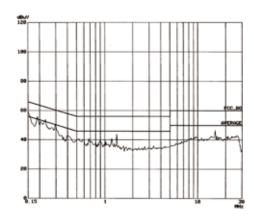


+12V step from 3A to 10A

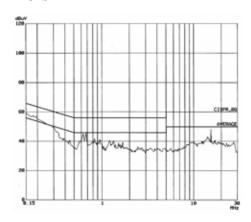
8. +12V peak load



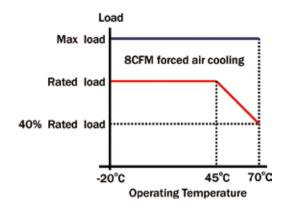
9. FCC B



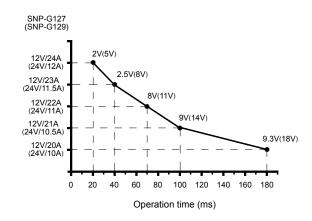
10. CISPR 22 B



11. Power derating curve



12. Capability for driving motor



-Jim-

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