

Medical & ITE General Purpose



3.7" x 6.6" x 1.46"

General Specifications:

Input voltage 90 VAC to 264 VAC
Input frequency 47 Hz to 63 Hz
Standby power < 0.2W at no load
(remote off status) < 0.5W at 5Vsb/40mA output
Inrush current < 30/60A at 115/230VAC
Efficiency 90% typ.
Hold up time 18ms typ.
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

Features:

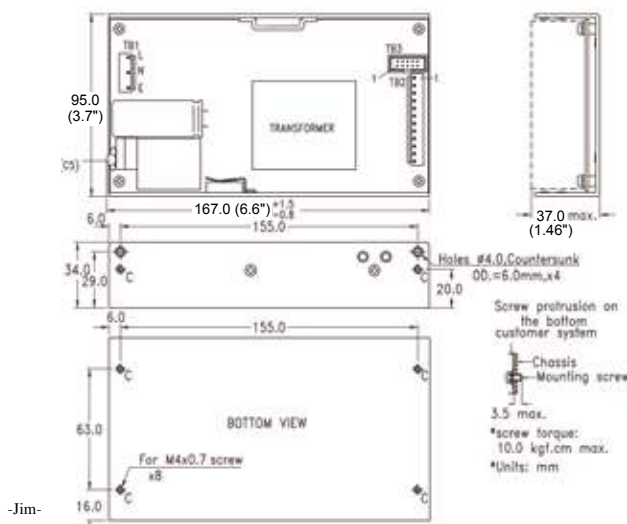
- Surge load (3 x rated current, Vo>60% typical for 1 sec)
- Peak load (1.5 ~ 2 x rated current, Vo=rated for 5 sec)
- Design for BF application
- Convection cooling for Rated power
- With +5Vsb & +12V Fan output
- Remote on/off & remote sense
- Fan speed controlled by loading
- EMI class B
- -20°C to +70°C operating temperature
- 5,000m operation altitude

Applications:

- For peak load and surge load applications, such as active speaker and audio power amplifier, 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.

Cooling 300W at convection cooling
420W at forced air 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 60950-1, 2nd Ed., EN 62368-1, 2nd Ed.
ANSI/AMMI/CSA/EN60601-1, 3.1 Ed.
Energy Saving ENERGY STAR
for computers version 6.0
for displays version 6.0
ErP regulation EC(No) 1275/2008

Mechanical Specifications:



Notes:

- Size:
3.7" x 6.6" x 1.46"
- Mounting Hole:
Side edge: 155 x 29 (mm)
Bottom: 155 x 63 (mm)
- Connectors:
AC input: Using JST B5P-VH withdraw 2 pins or equivalent
DC output: Using JST B12P-VH or equivalent
Remote ON/OFF & Standby Output & Fan output
& Remote Sense: 2 x 5 (10 pins) 0.1 pitch
- Output Pin assignment (TB2):

| | |
|-------|--------|
| 1 ~ 6 | 7 ~ 12 |
| Vo | GND |

| Function Pin assignment (TB3): | |
|--------------------------------|-----------|
| Pin 1 | +5VSB |
| Pin 2 | +5VSB GND |
| 3 | +FAN |
| 4 | -FAN |
| 5 | PG/PF |
| 6 | PG/PF GND |
| 7 | RM GND |
| 8 | RM ON/OFF |
| 9 | -RS |
| 10 | +RS |

- Packing:
Net weight: 660 g approx. / unit
Gross weight: 15.5 kg approx. / carton, 20 units / carton
Carton size (mm): 453 (L) x 362 (W) x 279 (H)

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-P307-S | +12V | 0A | 25A | 35A | 50A | +11.9V~+12.1V +4.5V~+5.5V | 87% | 90.5% | 91% | 89% |
| | +5Vsb | 0A | 1A | 1.5A | | | | | | |
| SNP-P309-S | +24V | 0A | 12.5A | 17.5A | 25A | +23.9V~+24.1V +4.5V~+5.5V | 87% | 91% | 91.5% | 89% |
| | +5Vsb | 0A | 1A | 1.5A | | | | | | |
| SNP-P30H-S (ITE only) | +60V | 0A | 5A | 7A | 10A | +59.1V~+60.1V +4.5V~+5.5V | 87% | 91% | 92% | 90% |
| | +5Vsb | 0A | 1A | 1.5A | | | | | | |

Note:

1. **Standby Power Consumption 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:**

300W for convection cooling; 420W for forced air cooling.

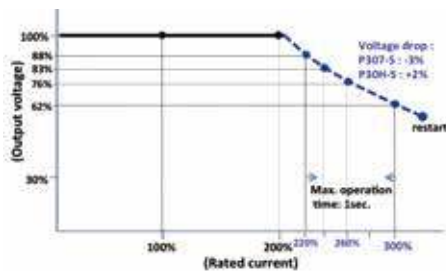
3. **Peak Load Duration:**

Peak 600W can last for 5 sec.

4. **High Torque Output Current:**

For motor drive or audio amplifier, the output current can be up to 300% rated current within 1000ms, and output voltage can keep above 60% Voltage.

Example: SNP-P309-S



5. **Isolation Grade:**

Primary ↔ Ground : 1MOPP (1500Vac)

Primary ↔ Secondary : 2MOPP (4000Vac)

Secondary ↔ Ground : 1MOPP (1500Vac)

6. **Leakage Current:**

Earth leakage current < 300uA

Touch current < 100uA

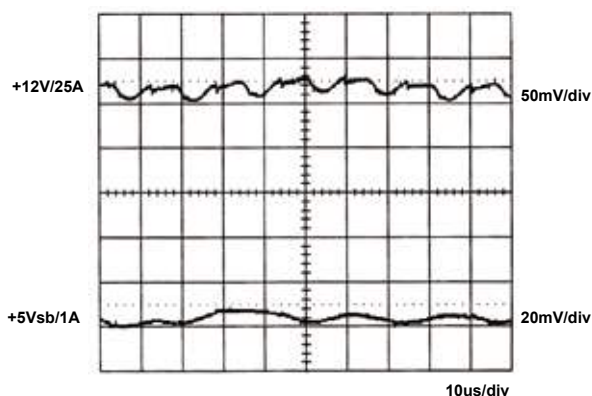
7. **Model Selection:**

SNP-P307-S and SNP-P309-S are for ITE & medical applications.

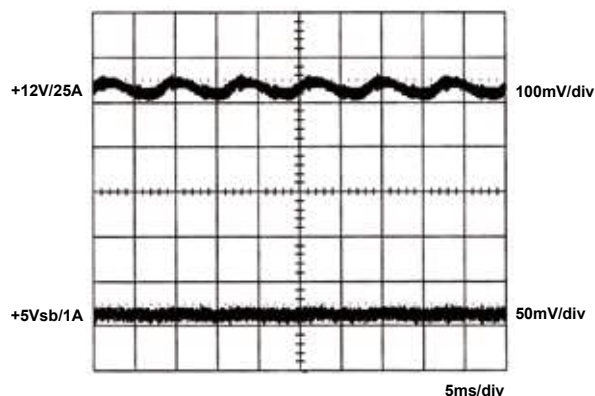
SNP-P30H-S is only for ITE application.

Performance for SNP-P307-S:

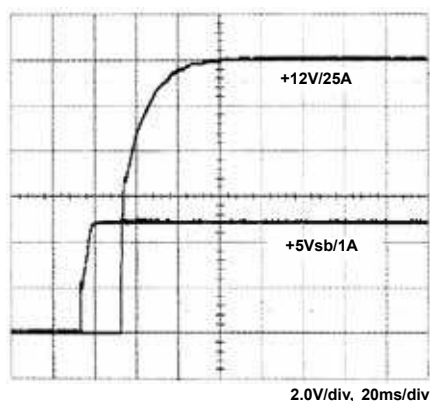
1. Switching frequency ripple



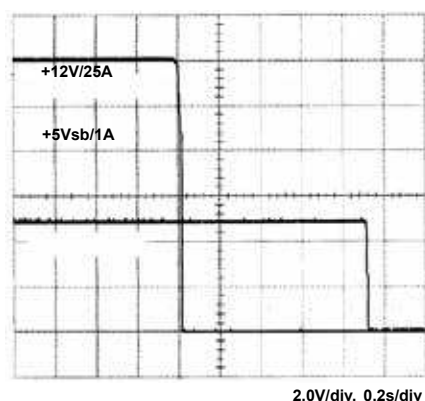
2. Line frequency ripple



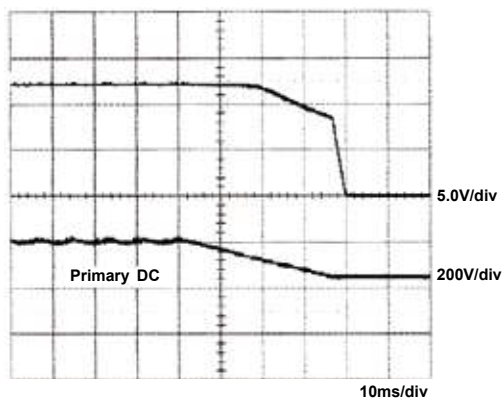
3. Output turn on wave form



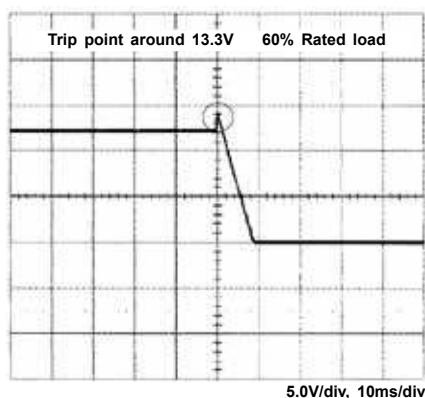
4. Output turn off wave form



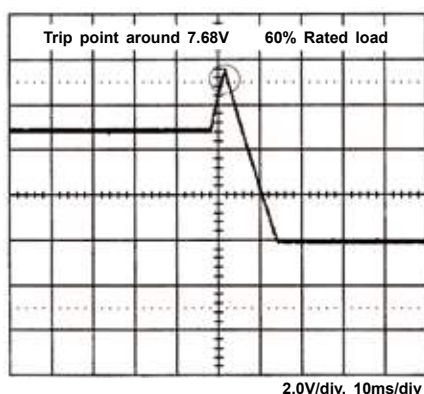
5. Hold-up time



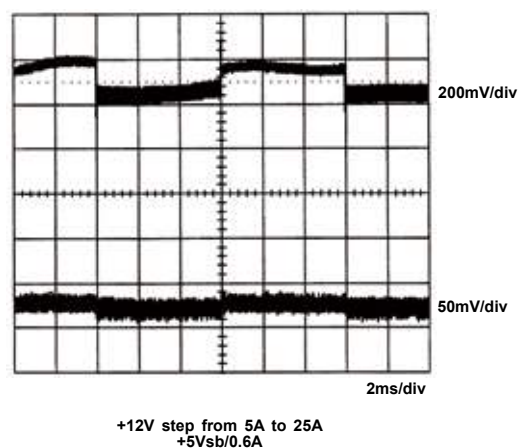
6. +12V Over voltage protection



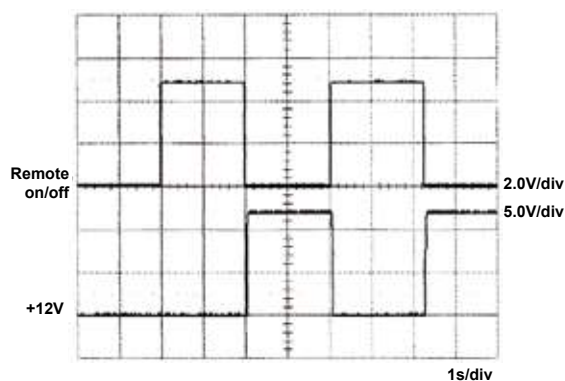
7. +5Vsb step response



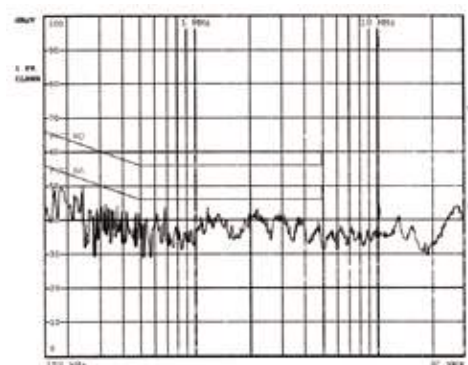
8. +12V step response



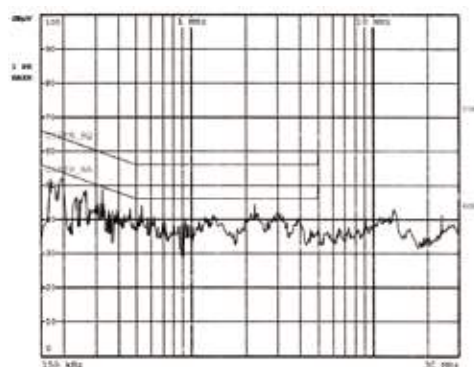
9. Remote on/off



10. FCC B



11. EN55011 B



12. Power derating curve

