

**1.57" x 2.76" x 0.93"**

### General Specifications:

Input voltage .....	90 VAC to 264 VAC
Input frequency .....	47 Hz to 63 Hz
Inrush current .....	< 40/80A at 115/230VAC
Hold up time .....	16ms
Over load/Short circuit protection .....	auto recovery
Over voltage protection .....	latch of
Operating temperature .....	-40°C to 70°C
	derating: 2.5% / °C > 50°C
Storage temperature .....	-40°C to +85°C

### Features:

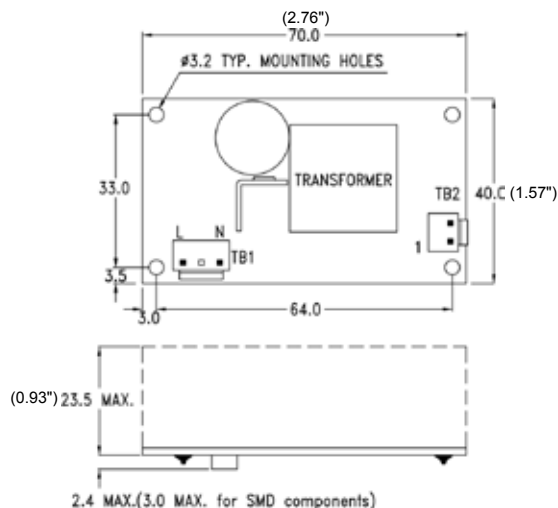
- Design for BF application
- 6dB EMI margin for Class I and Class II
- 5,000m operating altitude
- -40°C start-up capability
- 3000uF start-up capability
- 0.2W margin for standby application
- High torque for motor start up

### Applications:

- For dental, laboratory products, pumps, monitors, sleep apnea devices and many other uses.

EMI .....	EN55011 "B", EN61000-3-3
Harmonics.....	EN61000-3-2, class A
EMS.....	EN61000-4-2,-3,-4,-5,-6,-8,-11
Safety .....	UL/CSA/EN60950-1, 2 <sup>nd</sup> edition ANSI/AMMI/CSA/EN60601-1, 3 <sup>rd</sup> edition CB report, CE mark, RM report/file
Energy Saving .....	ENERGY STAR for computers version 6.0 for displays version 6.0 ErP regulation EC(No) 1275/2008

### Mechanical Specifications:



### Notes:

1. Size:  
1.57" x 2.76" x 0.93"
2. Mounting Hole:  
33 x 64 (mm)
3. Connectors:  
AC input: JST B2P3-VH or Molex 5277-02A or equivalent  
DC output: JST B2P-VH or Molex 5273-02A or equivalent
4. Output Pin assignment:

1	2
Vo	GND
5. Packing:  
Net weight: 61 g approx. / unit  
Gross weight: 12 kg approx. / carton, 150 units / carton  
Carton size (mm): 412 (L) x 327 (W) x 283 (H)

-David-

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

## Output Specifications:

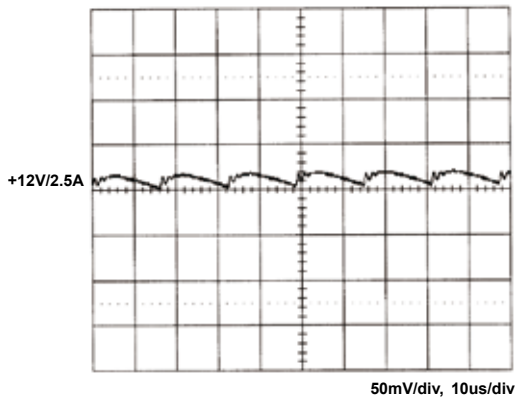
MODEL NO.	OUTPUT RAIL	LOAD				INITIAL ACCURACY	STEP EFFICIENCY			AVERAGE EFFICIENCY
		MIN.	RATED	MAX.	PEAK		@ 20% LOAD	@ 50% LOAD	@ 100% LOAD	
SNP-HF37 SNP-HF37-A SNP-HF37-M SNP-HF37-MA	+12V	0A	2.5A	3A	3.8A	+11.9V~+12.1V	86% 76%	87% 83%	86% 84%	86% 80%
SNP-HF38 SNP-HF38-A SNP-HF38-M SNP-HF38-MA	+15V	0A	2A	2.4A	3A	+14.9V~+15.1V	86% 76%	87% 83%	86% 84%	86% 80%
SNP-HF39 SNP-HF39-A SNP-HF39-M SNP-HF39-MA	+24V	0A	1.25A	1.5A	1.9A	+23.8V~+24.2V	86% 76%	87% 83%	86% 84%	86% 80%
SNP-HF3T SNP-HF3T-A SNP-HF3T-M SNP-HF3T-MA	+48V	0A	0.63A	0.75A	1A	+47.6V~+48.4V	86% 76%	87% 83%	86% 84%	86% 80%

### Note:

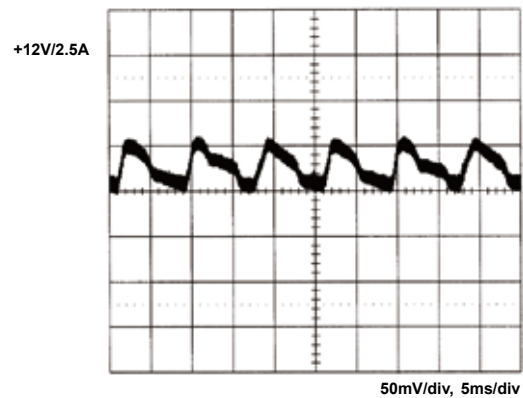
- Standby Power Consumption with System:**  
For computers and displays, ENERGY STAR in U.S. and ErP regulation in Europe require the input power should be less than 0.5W at standby mode.
- Output Load:**  
30W for convection cooling; 40W for forced air cooling.
- Peak Load Duration:**  
Peak 45W can last for 5 sec.
- Isolation Grade:**  
Primary ↔ Ground : 1MOPP (1500Vac)  
Primary ↔ Secondary : 2MOPP (4000Vac)  
Secondary ↔ Ground : 1MOPP (1500Vac)
- 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 that 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-HF3x is for ITE application which requires standby mode.  
SNP-HF3x-A is for ITE application but without burst sound and no standby mode.  
SNP-HF3x-M is for medical application which requires standby mode.  
SNP-HF3x-MA is for medical application but without burst sound and no standby mode.

### Performance for SNP-HF37-A:

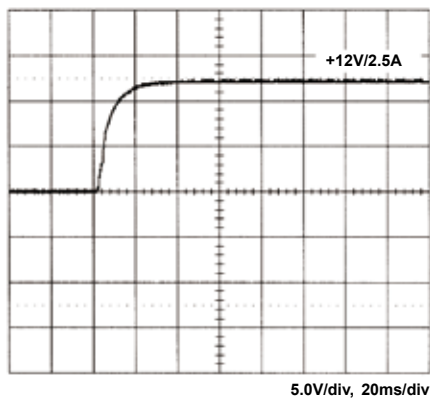
1. Switching frequency ripple



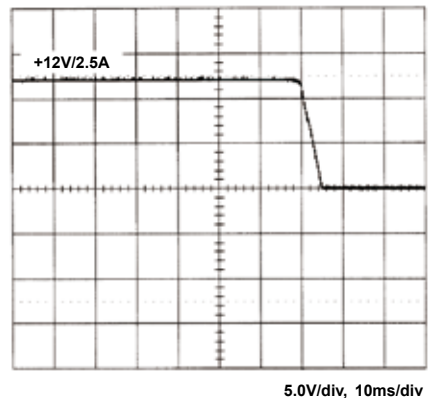
2. Line frequency ripple



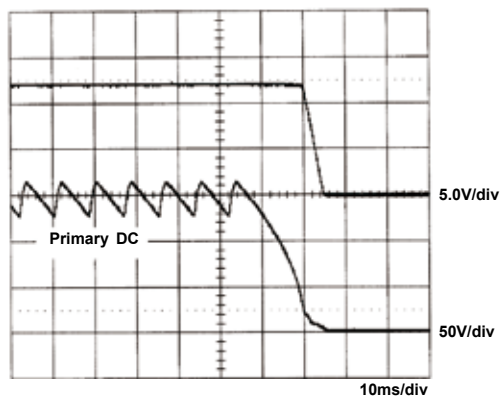
3. Output turn on wave form



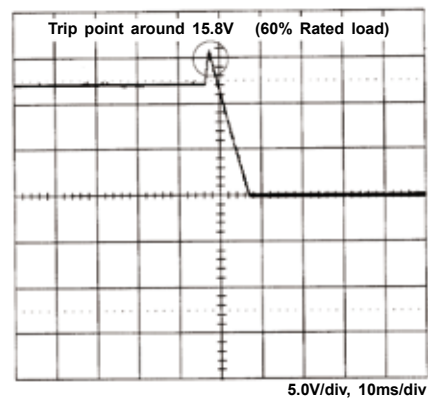
4. Output turn off wave form



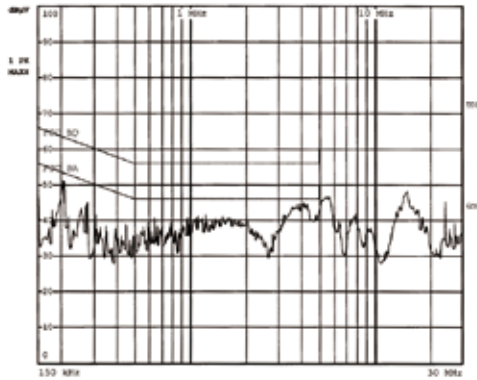
5. Hold-up time



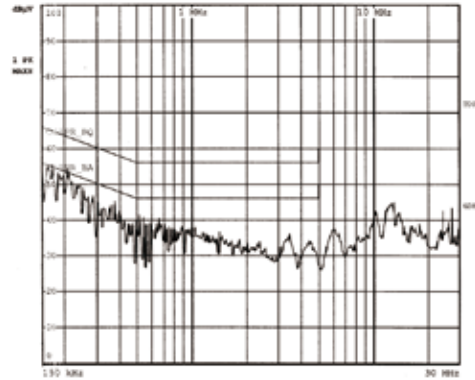
6. Over voltage protection



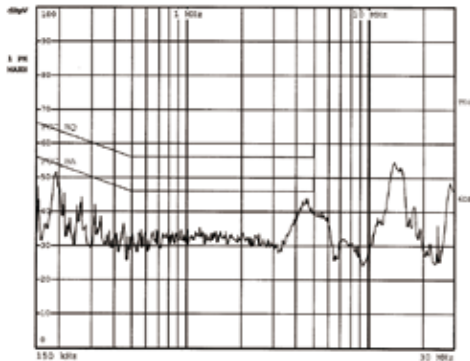
### 7. FCC B Class I



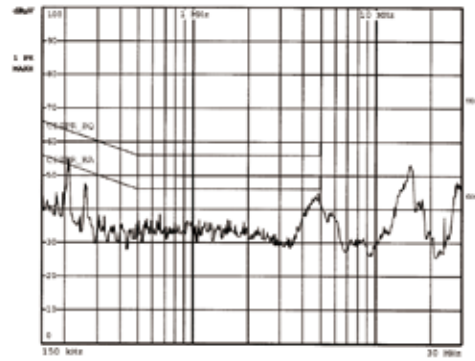
### 8. EN55011 22 B Class I



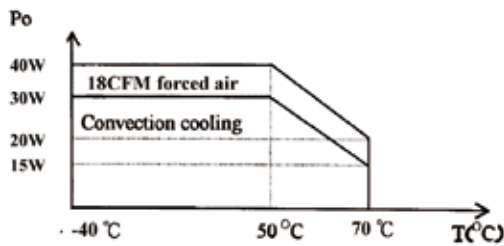
### 9. FCC B Class II



### 10. EN55011 22 B Class II



### 11. Power derating curve



### 12. Torque capability

