

SNP-G259 SPECIFICATION

SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N : SNP-G259

STANDARD PRODUCT

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Typed by Document Assistant	黃美芳 120925					
SKYNET ELECTRONIC		LAST REV. NO.				

1.0 INTRODUCTIONS

SNP-G259 is an open frame, general purpose 250W with convection cooling SMPS. It also can provide output power 370W with FAN cooling and 500W peak within 1.2sec ond. This SMPS designed to meet both Medical and ITE safety.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

Input voltage range : 90Vac to 264Vac
 Nominal line voltage : 115Vac/230Vac

2.2 Input frequency

47Hz to 63Hz

2.3 Input current

7A_{rms} max/115Vac, 3.5A_{rms} max/230Vac

2.4 Inrush current

70A max/115Vac, 140A max/230Vac.(EMI capacitors excluded, cold start at 25°C)

2.5 Class I Connection

Refer to item 8.0 Installation Instruction for Class I connection.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

Vo	rated load	max load	peak load	surge load
+24V	10.42A(250W)	15.5A(370W)	20.8A(500W)	32A
+12V(For Fan)	0.5A			

3.1.1 Factory adjustment

+23.76V to +24.24V (60% rated load, 115Vac)

3.1.2 Cooling

Rated load can be reached by convection cooling.

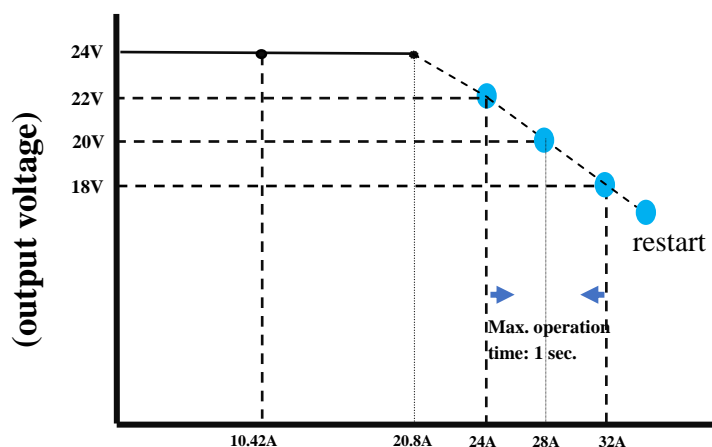
Max. load can be reached by conduction and force air cooling. **Refer to item 5.0**

Peak load can be held for 1.2sec without voltage drop.(For nominal line)

Surge load can be held for 1.0sec without voltage drop down to 18 volts.(For nominal line)

Shut down of peak or surge load will hold for 10sec. and re-start again.

Refer to conduction.



3.2 Ripple and noise

< 1% (20MHz bandwidth limited, 1X probe with 0.47uF parallel capacitor)

3.3 Line regulation

< $\pm 1\%$ (90Vac to 264Vac, compare with 115Vac)

3.4 Load regulation

< $\pm 1\%$ (20% to 100% rated load, compare with 60% rated load)

3.5 Capacitive load start-up capability

< 30000uF (115Vac, rated load)

3.6 Remote sense

Compensates 0.5V lead drop max.

4.0 GENERAL FEATURES**4.1 Efficiency**

Rated load efficiency : 90% typical at 115Vac

Rated load efficiency : 92% typical at 230Vac

4.2 Hold up time

> 25 ms at nominal line.

4.3 Protection**4.3.1 Over-voltage protection**

Trip point : +26V to +30V (60% rated load)

Protection mode : Latch-off

4.3.2 Short circuit and over-load protection

Protection mode : Auto-recovery

4.3.3 Over temperature protection

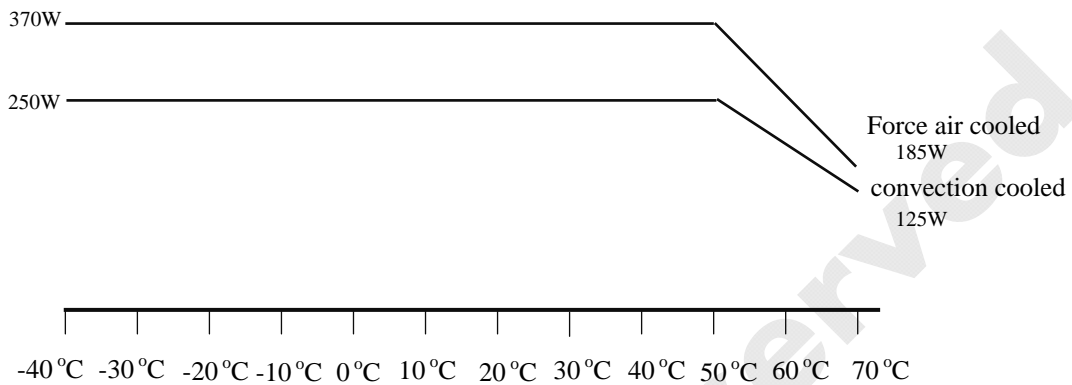
Protection mode : Auto-recovery

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

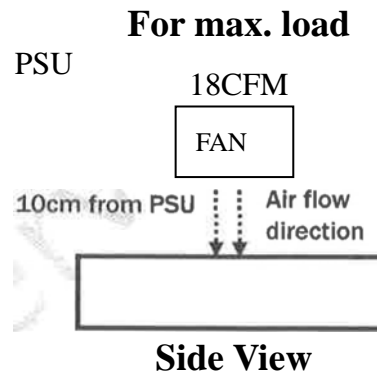
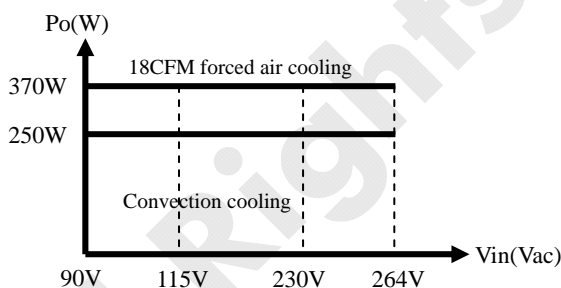
(A) -40°C to 70°C

(Output load derates linearly to 50% load from 50°C to 70 °c)



(B) Output power v.s. Input Voltage

(1) 90Vac ~ 264Vac , no derating.



5.2 Storage temperature

-40°C to 85°C

5.3 Operating humidity

5% to 95% RH, non-condensing

5.4 Altitude

0 to 5000m

5.5 MTBF

> 200Khrs (based on MIL-HDBK-217F, rated load)

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards (Label voltage: 100Vac to 240Vac)

Designed to meet the following regulations :

UL/CSA/EN/IEC 62368-1

ANSI/AMMI/CSA/EN/IEC 60601-1

6.2 EMI standards

FCC docket 20780 curve "B"

CISPR 22 "B"

EN55032

EN 61000-3-2 class "D"

EN 61000-3-3

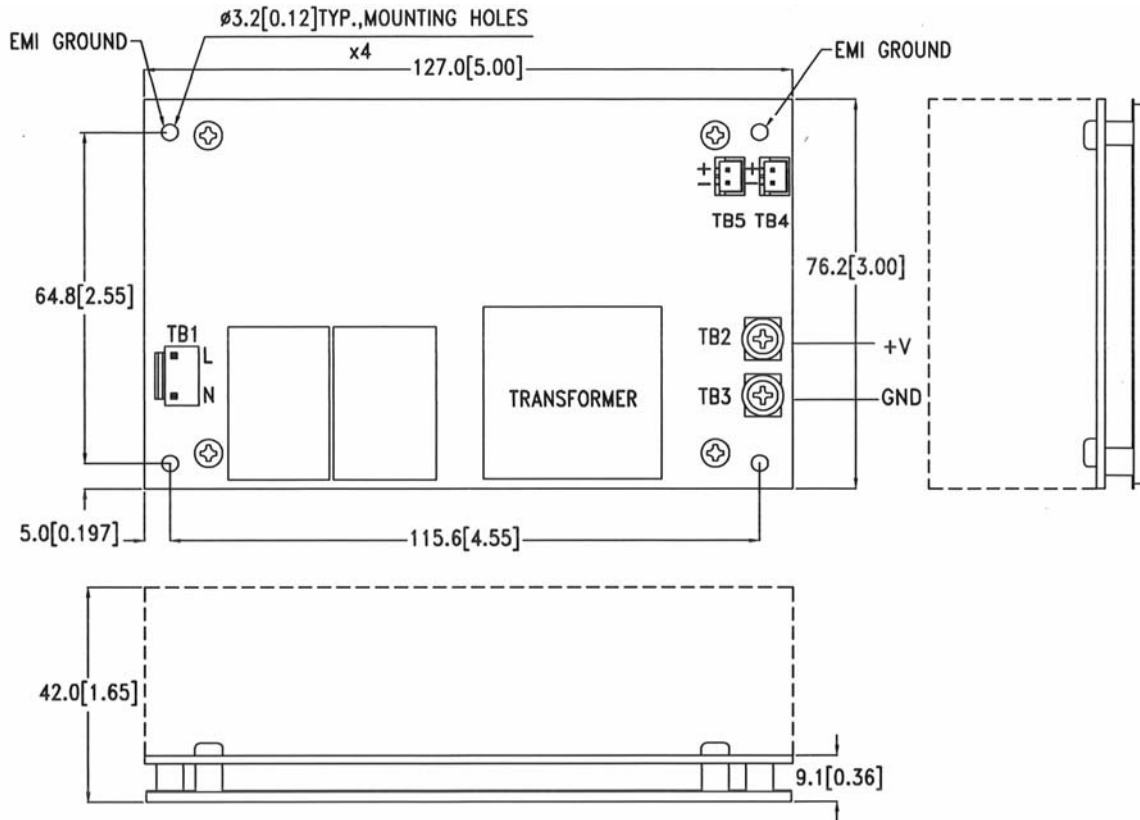
6.3 EMS standards

EN61000-4-2	8kV/contact discharge, 15kV/air discharge	Criterion A
EN61000-4-4	2kV (100KHz)	Criterion A
EN61000-4-5	1kV/Line-Line, 2kV/Line-Earth	Criterion A
EN61000-4-11	30% dips 500ms,	Criterion A
	60% dips 200ms,	Criterion B
	100% dips 10ms,	Criterion A
	100% dips 5000ms,	Criterion B
	100% dips 20ms,	Criterion B

7.0 MECHANICAL SPECIFICATION

7.1 Dimensions

Dimensions below are shown in mm[inch]. Tolerance specified is $\pm 0.4\text{mm}[0.02]$.



7.2 Connectors

TB1--AC input : JST B2P3-VH or equivalent.

(Mates with : JST VHR-3N Housing or equivalent.)

TB2 & TB3--DC output : Terminals Block (For # 6-32 screw, Torque 8 kg-cm max.)

TB4-----For + 12V fan use only : JST B 2B-XH-A or equivalent.

(Mate with JST XHP-2 or equivalent)

TB5-----For remote sense use only : JST B 2B-XH-A or equivalent.

(Mate with JST XHP-2 or equivalent)

7.3 Packing

Net weight : 420g approx. / unit

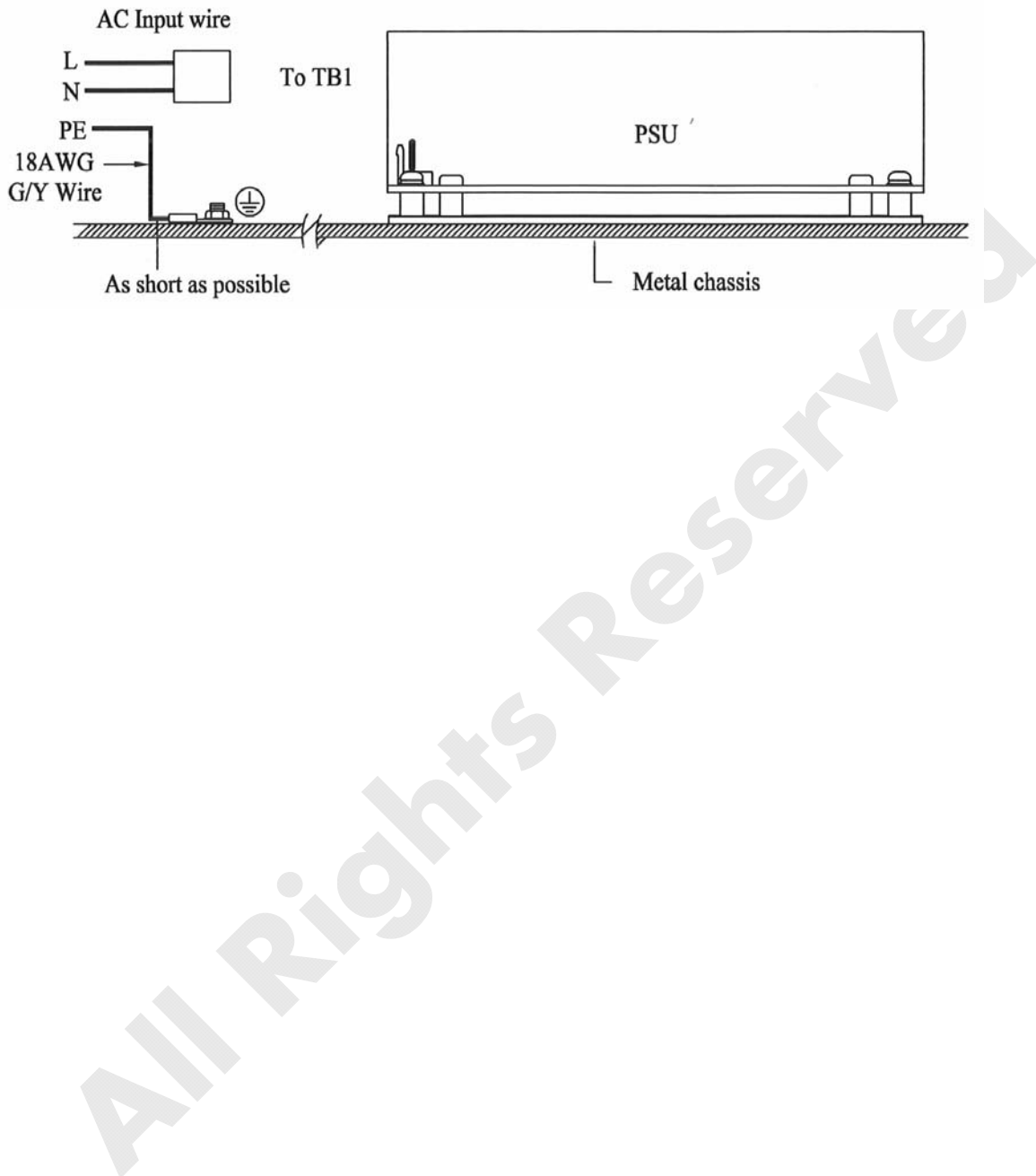
Carton size (mm) : 384 (L) x 339 (W) x 327 (H)

Quantity : 24 units / carton

Gross weight : 12.5kg approx. / carton

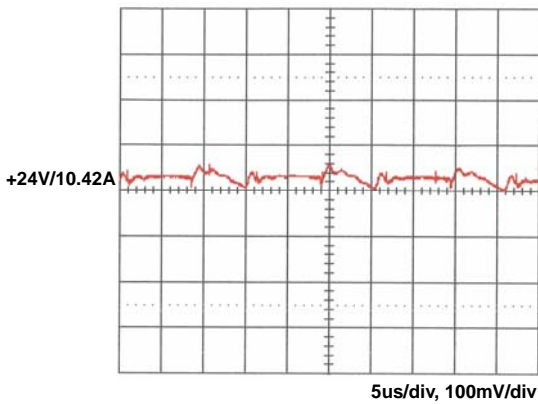
8.0 APPLICATION NOTE

8.1 Installation information

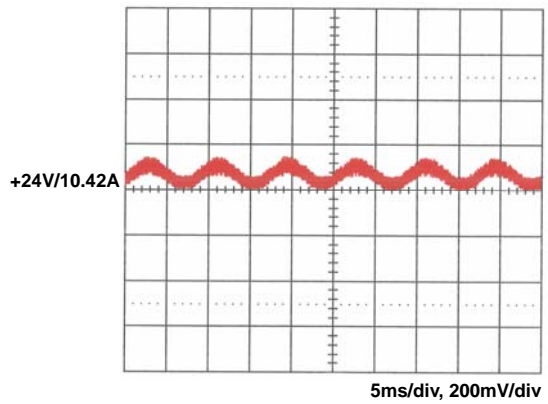


9.0 PERFORMANCE (input voltage is 115VAC, unless others specified)

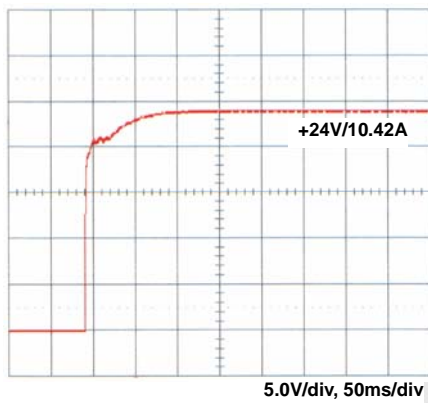
9.1 Switching frequency ripple



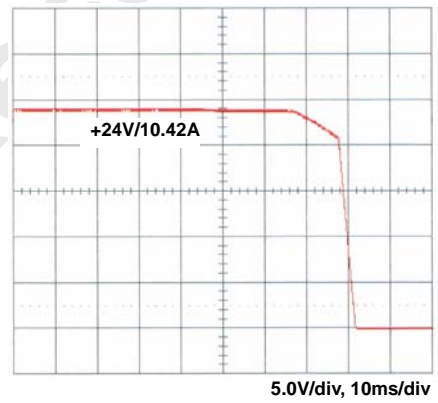
9.2 Line frequency ripple



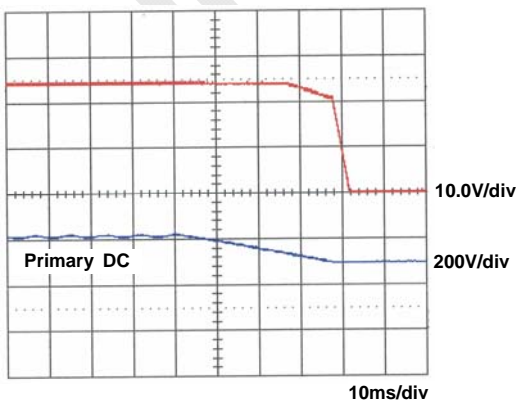
9.3 Output turn on wave form



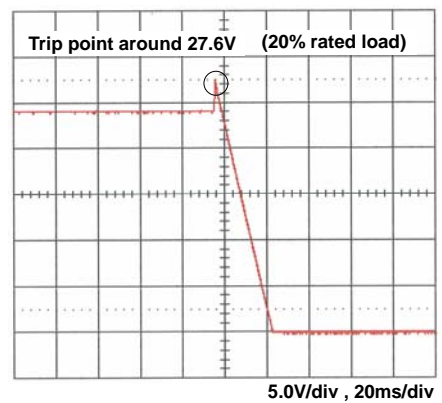
9.4 Output turn off wave form



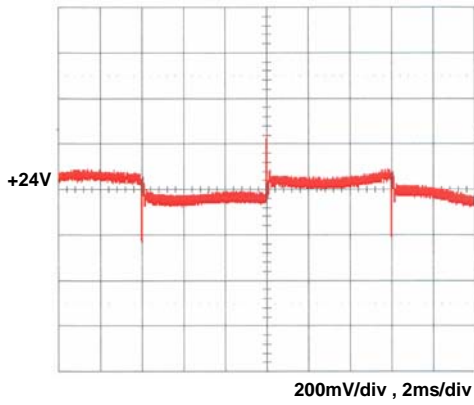
9.5 Hold-up time



9.6 Over voltage protection

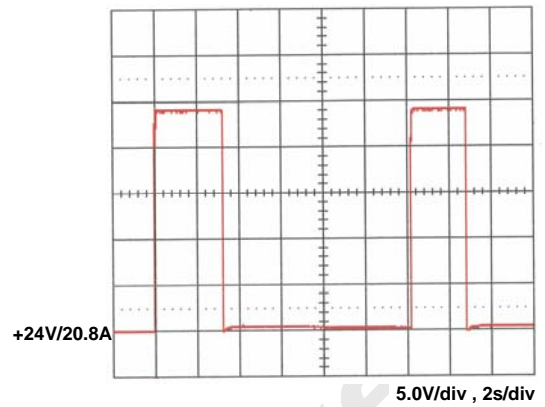


9.7 +24V Step response

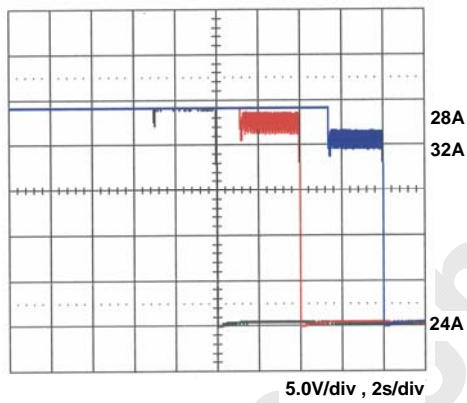


+24V step from 2.084A to 10.42A

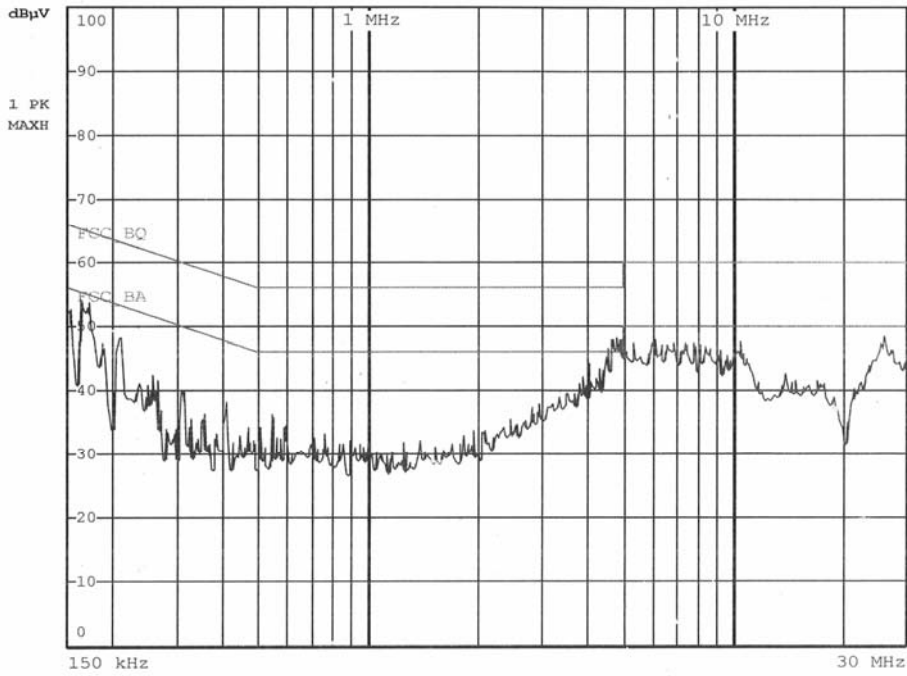
9.8 Peak load



9.9 Surge load capability



9.10 FCC B performance



9.11 CISPR "B"

