SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N : SNP-GK69

STANDARD PRODUCT

Reviewed by Product Manager	12-24-18	clark 1-5-21				
Typed by Document Assistant	12/18	01052				
SKYNET ELECTRONIC			LAST REV. NO.			

1.0 INTRODUCTIONS

SNP-GK69 is an open frame and rated 60W SMPS for general purpose use. It features in ITE safety, green power and low profile.

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

1.4A_{rms} max/115Vac, 0.9A_{rms} max/230Vac

2.4 Inrush current

30A max/115Vac, 60A max/230Vac (EMI capacitors excluded, cold start at 25°C)

2.5 Test Condition

All specs except international standards or specs with special notes are defined and tested at nominal line input, rated load and 25°C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

Vo	min. load	rated load	peak load
+24V	0A	2.5A	3.5A

3.1.1 Factory adjustment

+23.8V to +24.2V (60% rated load, 115Vac)

3.1.2 Peak load max duration

3sec. (duty cycle < 10%, average power < rated load)

3.2 Ripple and noise

< 100mV (20MHz bandwidth limited, 1X probe with 0.47uF parallel capacitor)

3.3 Line regulation

< ±0.5% (90Vac to 264Vac, compare with 115Vac)

3.4 Load regulation

< ±1% (20% to 100% rated load, compare with 60% rated load)

3.5 Start up time

<0.5sec (100Vac)

3.6 Capacitive load start-up capability

< 18000uF

4.0 GENERAL FEATURES

4.1 Efficiency
86% typical

4.2 Hold up time
16ms typical

4.3 No load input power
< 0.5W .

4.4 Min load for no acoustic noise
5W

4.5 Protection

4.5.1 Over-voltage protection
Trip point : +28V to +36V (60% rated load)
Protection mode : Latch-off

4.5.2 Short circuit and over-load protection
Protection mode : Auto-recovery

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature
-20°C to 70°C (Output reduces linearly to 50% load from 50°C to 70 °C)

5.2 Storage temperature
-40°C to 85°C

5.3 Operating humidity
5% to 95% RH, non-condensing

5.4 Altitude
0 to 3000m

5.5 MTBF
> 0.4Mhrs (based on MIL-HDBK-217F, rated load, 50 °C)

6.0 INTERNATIONAL STANDARDS

6.1 Safety approvals

Label voltage : 100Vac to 240Vac
UL 60950-1
CSA 22.2 NO.60950-1
EN 62368-1:2014+A11

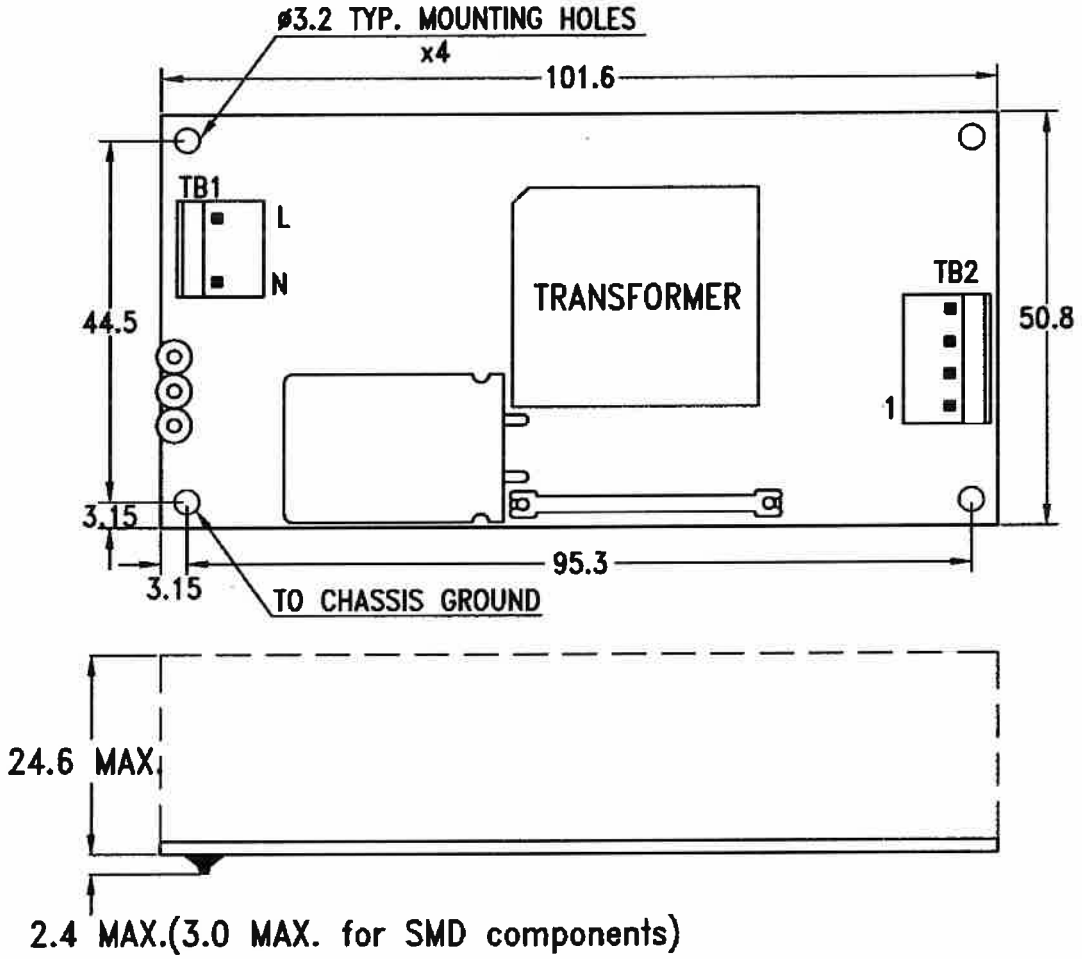
6.2 Emissions and Harmonic currents

FCC docket 20780	level B
CISPR 22	level B
EN 61000-3-2	Class A
EN 61000-3-3	

6.3 Immunity

EN61000-4-2	8kV/contact discharge, 15kV/air discharge	Criterion A
EN61000-4-3	10V/M with 80% AM	Criterion A
EN61000-4-4	2kV (100KHz)	Criterion A
EN61000-4-5	1kV/Line-Line, 2kV/Line-Earth	Criterion A
EN61000-4-6	10V with 80% AM	Criterion A
EN61000-4-8	30A/m	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 shown in mm as above. Tolerance specified is +-0.4mm.

7.2 Connectors

TB1--AC Input : Molex 5277-02A or equivalent.

TB2--DC Output : Molex 5273-04A or equivalent.

7.3 DC Output pin assignment

Pin 1 + 24V
2 + 24V
3 GND
4 GND

7.4 Packing

Net weinght : 110 g approx. /unit

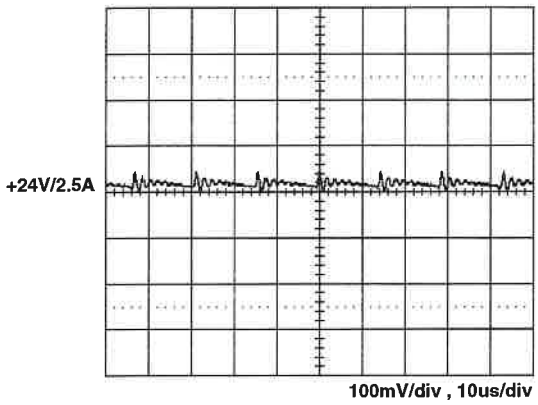
Carton size(mm) : 422 (L) x 382 (W) x 277 (H)

Quantity : 100 units / carton

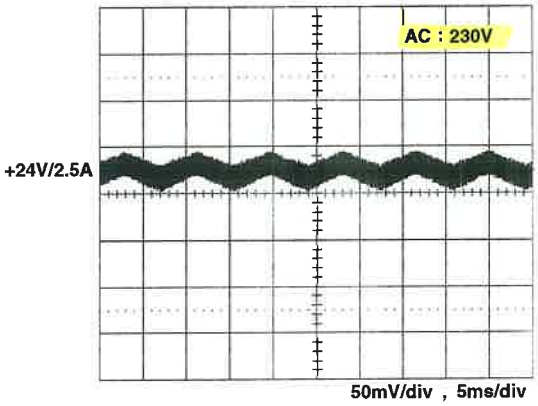
Gross weinght : 13.5 kg approx. / carton

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

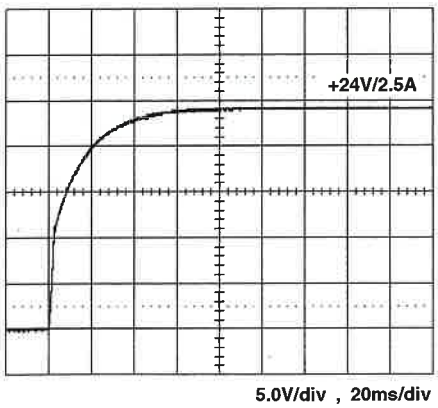
8.1 Switching frequency ripple



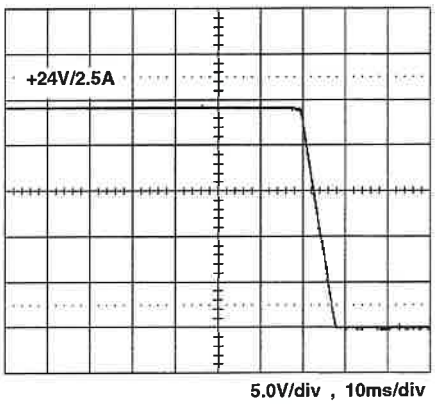
8.2 Line frequency ripple



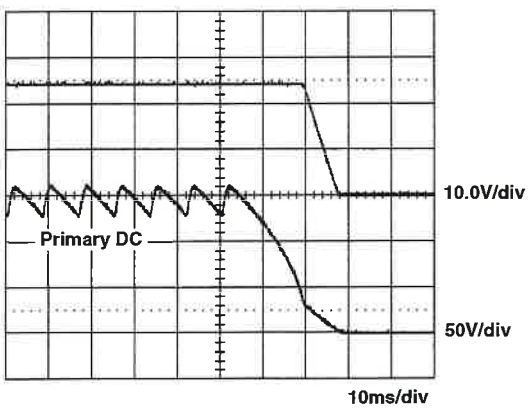
8.3 Output turn on wave form



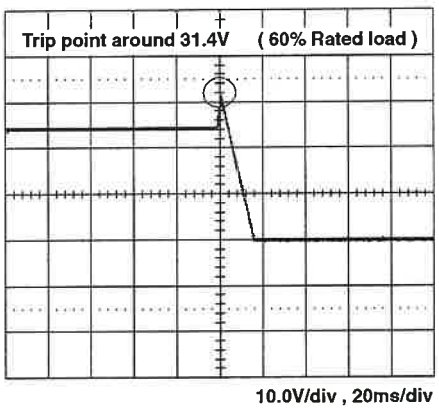
8.4 Output turn off wave form



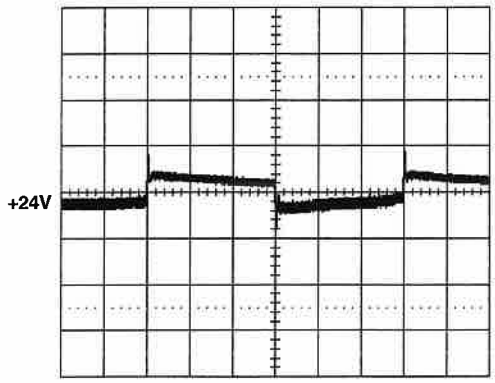
8.5 Hold-up time



8.6 Over voltage protection

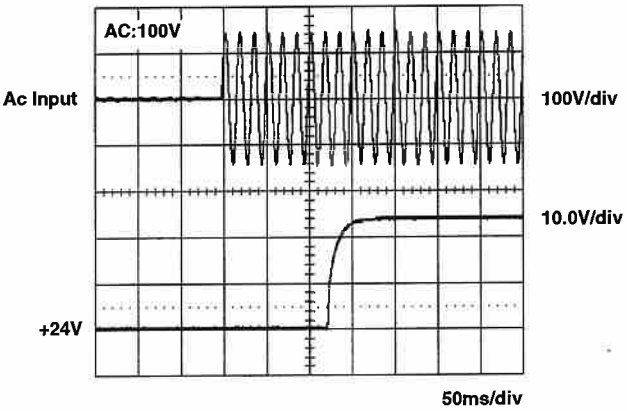


8.7 +24V step response

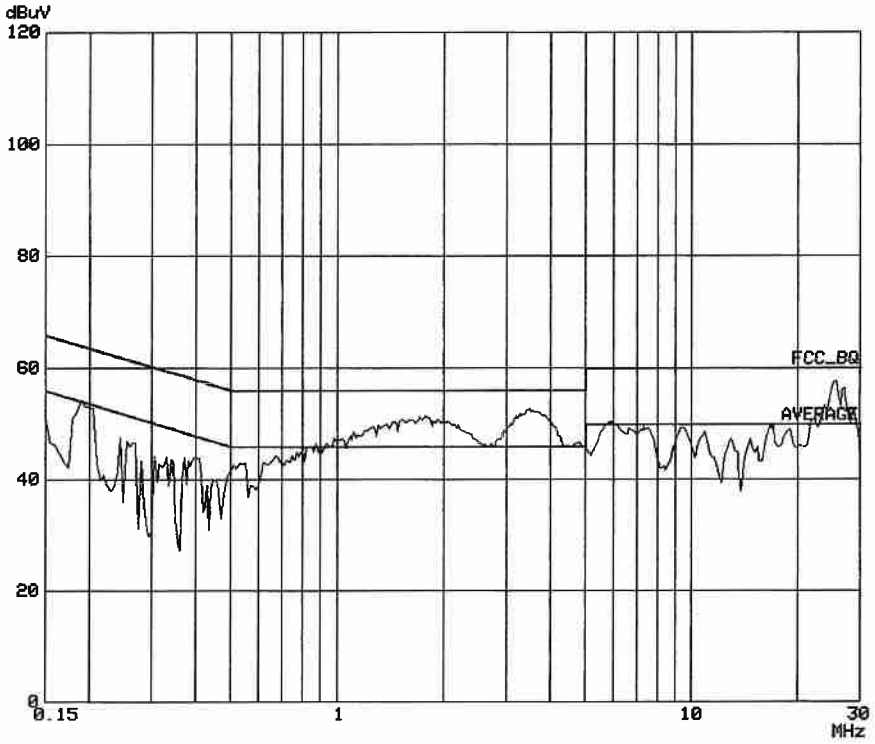


+24V step from 0.5 to 2.5A

8.8 Start up Time



8.9 FCC B performance



8.10 EN55022 "B"