

SNP-A077 SPECIFICATION

SPECIFICATION

for

SWITCHING POWER SUPPLY

M/N: SNP-A077

Check by Product Engineer	梁進源 9-11-96					
Typed by Document Assistant	林鎮遠 091196					
SKYNET ELECTRONIC			LAST REV. NO. A077-022497			



1.0 INTRODUCTIONS

SNP-A077 is a single output, 70 watts switching mode power supply. It is designed to meet UL/CSA/TUV/VDE regulations and EN 55022 "B" conducted EMI.

2.0 INPUT SPECIFICATIONS

2.1 Input Voltage

The range of input voltage is from 90VAC to 270VAC.

2.2 Input frequency

The range of input frequency is from 47Hz to 63Hz.

2.3 Input current

The maximum input current is 2A at 115VAC or 1A at 230VAC.

2.4 Inrush current

The inrush current is less than 30A at 115VAC input or 60A at 230V AC input, cold start, 25 °C.

3.0 OUTPUT SPECIFICATIONS

3.1 Load range

output	min. load	rated load	peak load	voltage accuracy
+12V	0A	6A		+11.40V to +12.60V

At factory, the output is adjusted to +12V \pm 1% in 60% of rated load conditions.

3.2 Ripple and noise

The peak to peak ripple and noise is less 100mV. Measuring is done by a 15 MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load.

3.3 Line regulation

The line regulation is less than \pm 1% while measuring at rated load and \pm 10% of input voltage change.

3.4 Load regulation

The load regulation is less than \pm 5%. Measuring is done by changing the measured output load \pm 40% from 60% rated load.

4.0 GENERAL FEATURES

4.1 Efficiency

The efficiency is higher than 70% while measuring at 115VAC and rated load.

4.2 Hold up time

The hold up time is longer than 16mS at 115VAC input and rated load, which is measured from the end of the last charging pulse to when the main output drops down to 95% output voltage.

4.3 Protection

4.3.1 Over voltage protection

For some reasons the power supply might fail to control itself, the build-in over voltage protection circuit will shut down the outputs to prevent damaging external circuits. The trip point of crowbar circuit is around 13.1V to 15.1V.

4.3.2 Short circuit protection

The power supply will go into hiccup mode against short circuit or over load conditions, and will do auto-recovery while faulty conditions are removed.

5.0 ENVIRONMENT SPECIFICATIONS

5.1 Operating temperature

0°C to 40°C

5.2 Storage temperature

-20°C to 85°C

5.3 Altitude

Will operate properly at any altitude between 0 to 10000ft.

6.0 INTERNATIONAL STANDARDS

6.1 Safety standards

Designed to meet the following standards :

UL 1950

CSA 22.2 No.234 & No. 950

VDE EN 60 950

6.2 EMI standards

Designed to meet the following limits :

FCC docket 20780 curve "B"

EN55022 Class "B"

EN60555-2

6.3 EMS standards

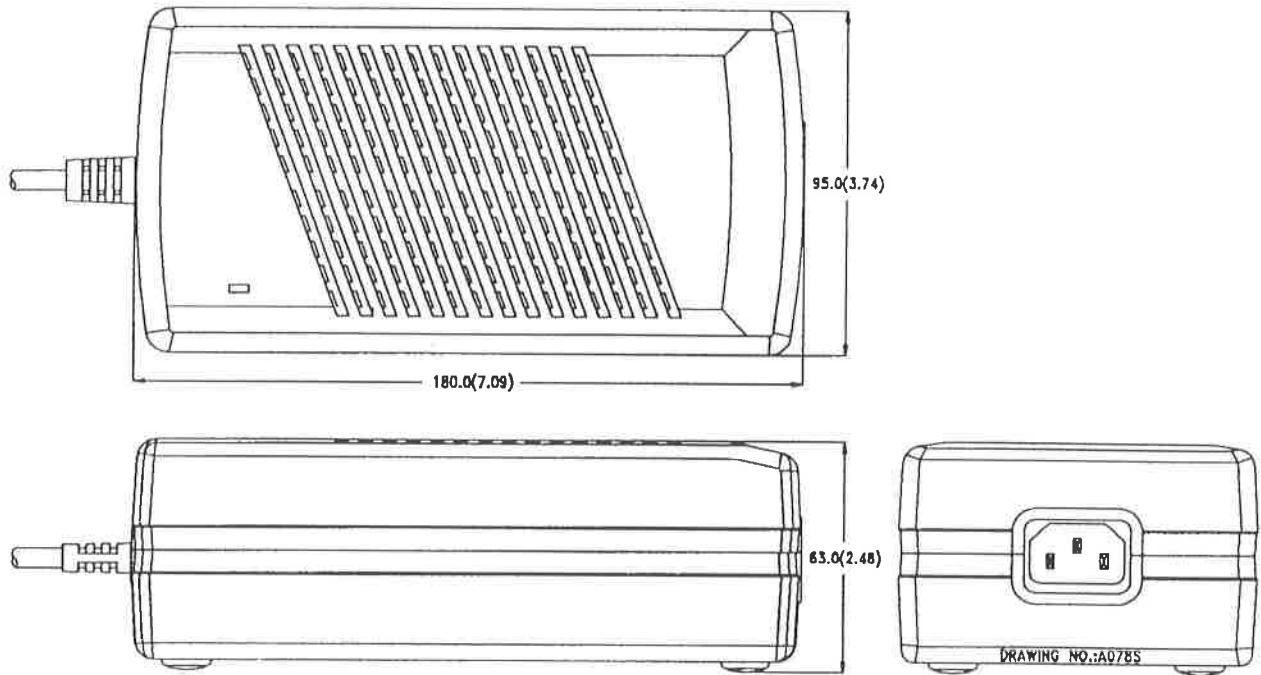
IEC 801-2 : 8KV air discharge

IEC 801-3 : 3V/m

IEC 801-4 : 2KV

IEC 801-5 : 1KV

7.0 MECHANICAL SPECIFICATION



7.1 Dimensions

Dimensions shown in mm (inch) as above.
Tolerance specified is + - 1 mm (Excluding DC wire)

7.2 Connectors

AC Inlet : Meet IEC 320 Inlet.
DC output : DC 5 pins at 180° DIN with a cable of approximately 183 +/-5cm length.

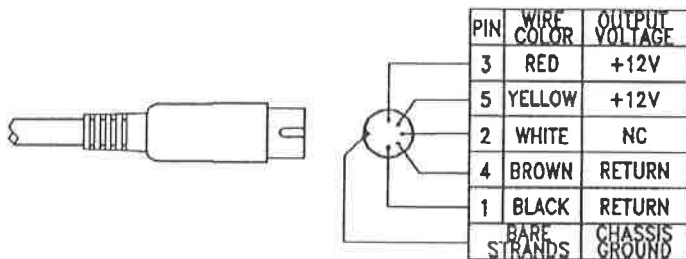
7.3 Power on indicator

Green light on the top of box.

7.4 Color

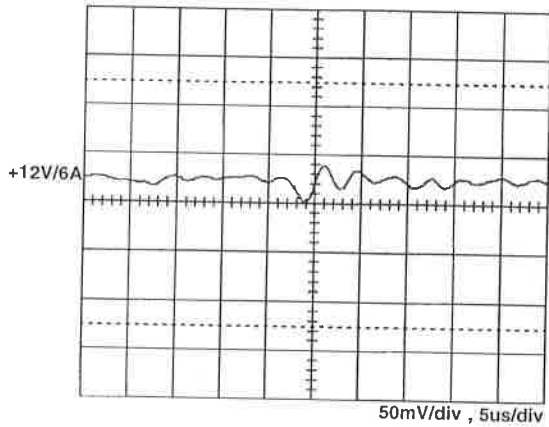
Black

7.5 DC output pin assignment :

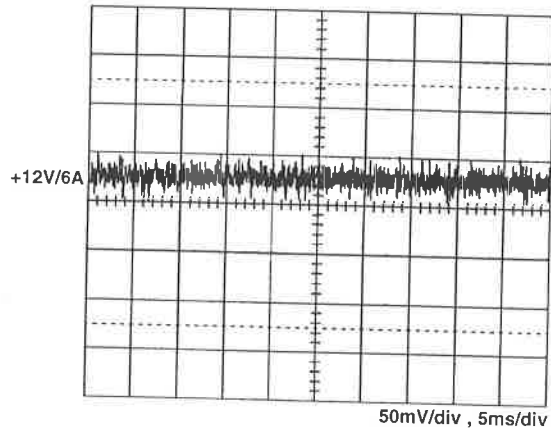


8.0 PERFORMANCE (input voltage is 115VAC , unless others specified.)

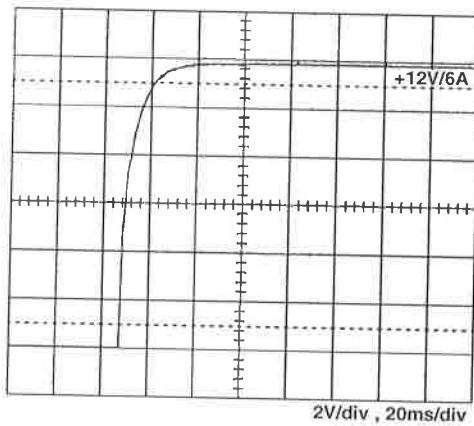
8.1 Switching frequency ripple



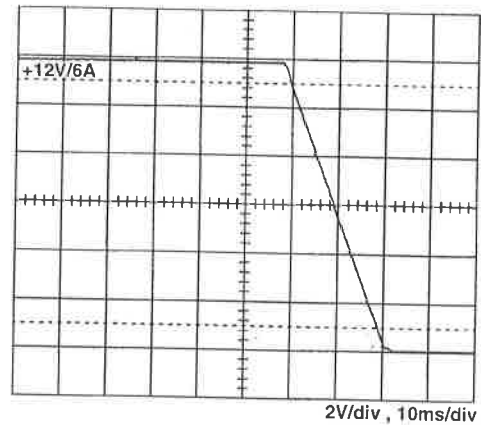
8.2 Line frequency ripple



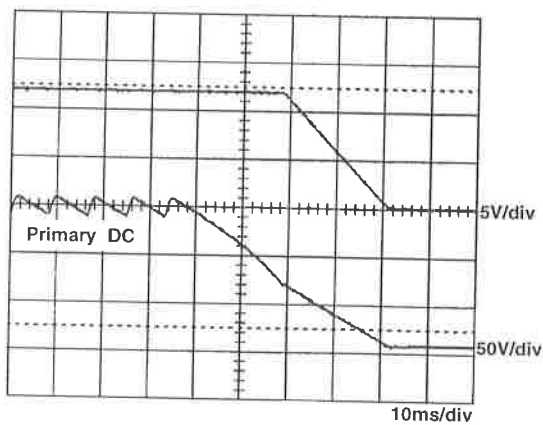
8.3 Output turn on wave form



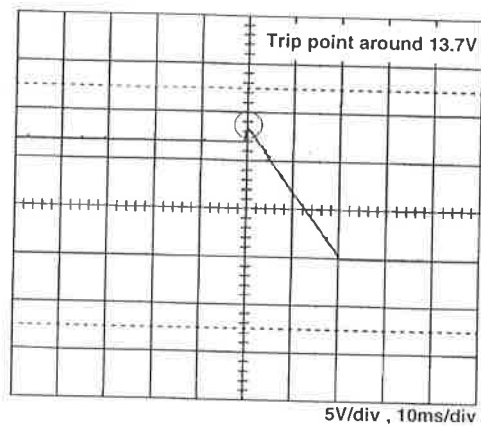
8.4 Output turn off wave form



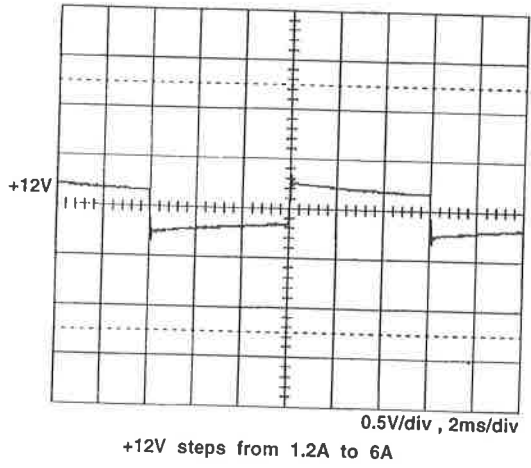
8.5 Hold-up time



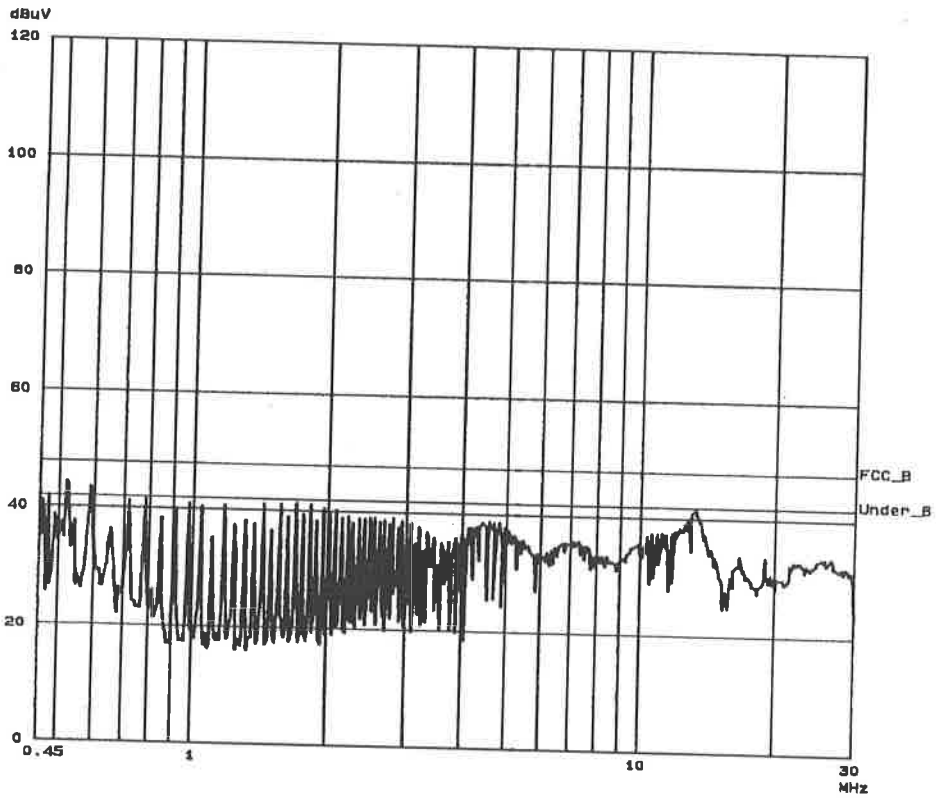
8.6 Over voltage protection



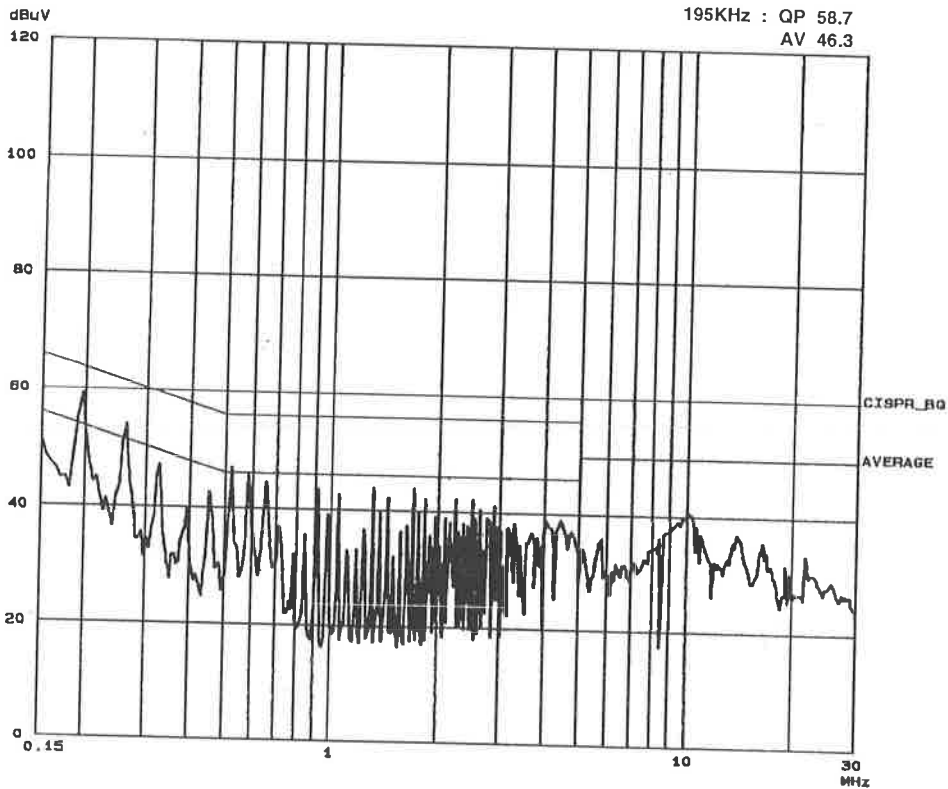
8.7 +12V step response



8.8 FCC B performance

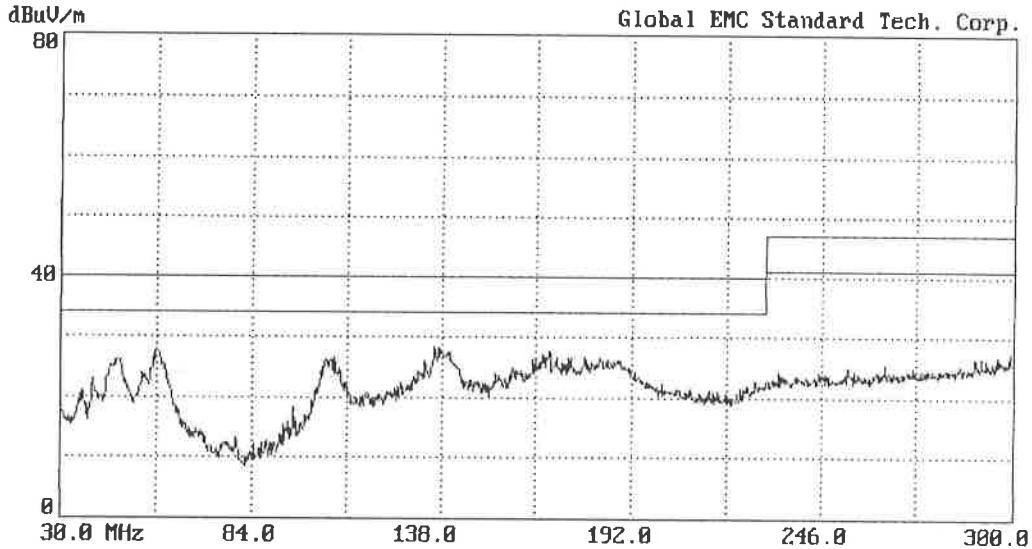


8.9 CISPR 22 class B

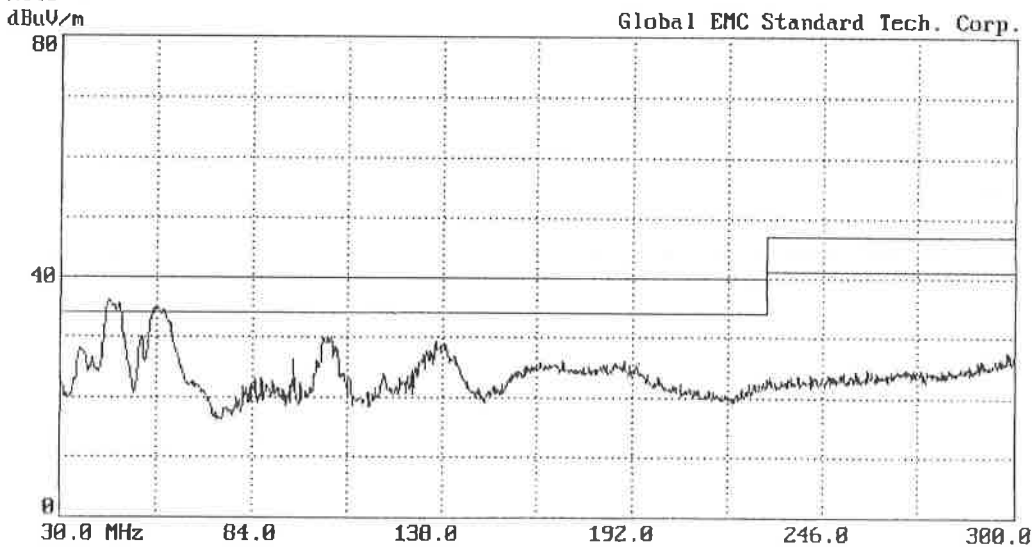


8.10 Performance of EMI (Radiation)

File#: CHARES.EI - 854 Sweep Date : 09-04,1996 Wed Time: 04:06:36 am
 Site : Skynet Probe : 3110B Horizontal
 Limit: CISPR CLASS-B 3m Margin: 6 dB
 EUT : SNP-A077 Std :
 Power: AC230V Trace :
 Note : R/D9627001

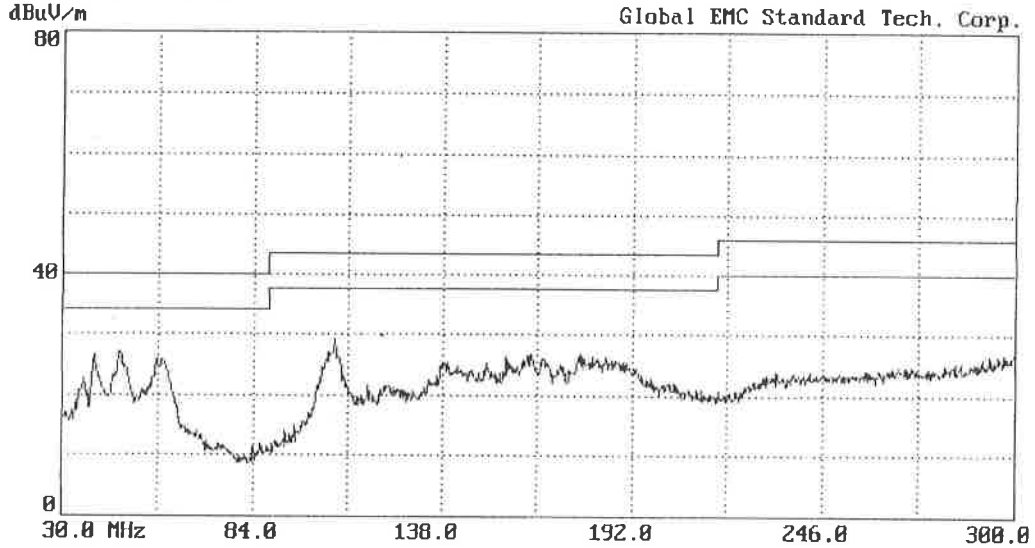


File#: CHARES.EI - 855 Sweep Date : 09-04,1996 Wed Time: 04:07:56 am
 Site : Skynet Probe : 3110B Vertical
 Limit: CISPR CLASS-B 3m Margin: 6 dB
 EUT : Std :
 Power: Trace :
 Note :



8.11 Performance of EMI (Radiation)

File#: CHARES.EI - 857 Sweep Date : 09-04,1996 Wed Time: 04:16:01 am
 Site : Skynet Probe : 3110B Horizontal
 Limit: FCC CLASS-B 3m Margin: 6 dB
 EUT : SNP-A077 Std :
 Power: AC115V Trace :
 Note : R/D9627001



File#: CHARES.EI - 858 Sweep Date : 09-04,1996 Wed Time: 04:17:21 am
 Site : Skynet Probe : 3110B Vertical
 Limit: FCC CLASS-B 3m Margin: 6 dB
 EUT : Std :
 Power: Trace :
 Note :

