

# **Switching Adapter** (Universal)

**SNP-K02 Series SNP-K03 Series** 



**Description:** 

SNP-K02 / SNP-K03 series is an universal with various options of outputs in plastic box which is with color options of either black or beige. It is designed in full compliance with UL, CSA, and VDE regulations.

### **Model available:**

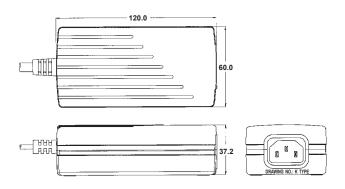
- SNP-K021 for 5V/2A, 12V/0.2A, -12V/0.2A
- SNP-K026-D for 5V/3A
- SNP-K037 for 12V/1.5A
- SNP-K038 for 15V/1.33A
- SNP-K039 for 24V/1A

## **General Specifications:**

Input voltage	90VAC to 264VAC
Input frequency	47Hz to 63Hz
Inrush current	less than 60A at 220VAC
	cold start, 25°C
Efficiency 73% t	typical depending on model
Hold up time	>16mS
	at rated load and 115VAC
Over load protection	latch off
Short circuit protection	latch off

Operating temperature	0°C to 40°C, rated load
Cooling	free air convection
Storage temperature	20°C to +85°C
EMI	EN55022 "B", EN61000-3-2
	FCC docket 20780 class "B"
EMS	IEC 801-2 8KV air discharge
	IEC 801-3 3V/m
	IEC 801-4 1KV
Safety	meet UL 1950
	CSA C22.2 No. 234
	TUV EN 60950-1

# **Mechanical Specifications:**



- Dimensions shown in mm as left. 120 X 60 X 37.2 (mm)
- Packing:

Net weight: 270 g approx. / unit

Gross weight: 18.5 kg approx. / carton, 60 units / carton Carton size (mm): 555 (L) x 395 (W) x 421 (H)

3. Connectors:

AC input : IEC 320/CEE 22 standard DC output : according to final spec.\*

Options available for DC output connector if the detailed specifications can be provided.

-James-

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20W SNP-K02 Series SNP-K03 Series

# **Output Specifications:**

MODEL NO.	OUTPUT RAIL	LOAD MIN. RATED PEAK		PEAK	VOLTAGE ACCURACY	RIPPLE NOISE	LINE REG.	LOAD REG.
SNP-K021	+5V +12V -12V	0A 0A 0A	2A 0.2A 0.2A		+4.90V~+5.10V +11.40V~+12.60V -11.40V~-12.60V	70mV 100mV 100mV	±1% ±1% ±1%	±3% ±3% ±3%
SNP-K026-D	+5V	0A	3A	3.5A	+4.90V~+5.10V	50mV	±1%	±4%
SNP-K037	+12V	0A	1.5A		+11.40V~+12.60V	100mV	±1%	±5%
SNP-K038	+15V	0A	1.33A	1.7A	+14.85V~+15.15V	100mV	±1%	±2%
SNP-K039	+24V	0A	1A	1.6A	+21.60V~+26.40V	240mV	±1%	±5%

### Note:

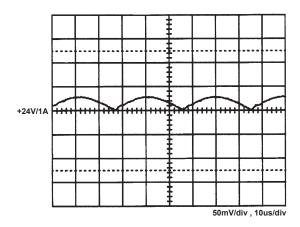
- 1. Each output can provide up to peak load separately when the power supply starts up. Continuous staying in more than rated load is not allowed.
- 2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- 3. Line Regulation is defined by changing  $\pm 10\%$  of input voltage from nominal line at rated load.
- 4. Load regulation is defined by changing ±40% of measured output load from 60% rated load at another output set to 60% rated load.
- 5. Ripple & Noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47uF capacitor at rated load and nominal line.
- 6. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to low limit of main output at rated load and nominal line.
- 7. Efficiency is measured at rated load, and nominal line, without output cable.

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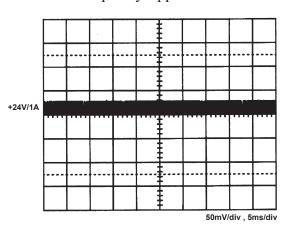
20W SNP-K02 Series SNP-K03 Series

### **Performance for SNP-K039:**

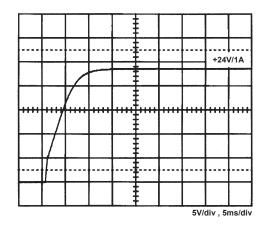
1. Switching frequency ripple



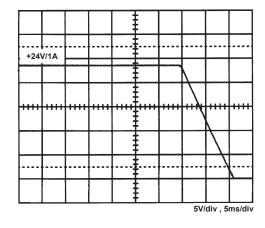
2. Line Frequency ripple



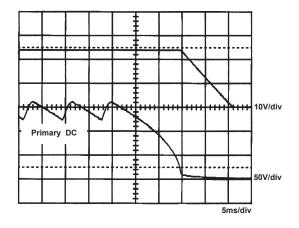
3. Output turn on wave form



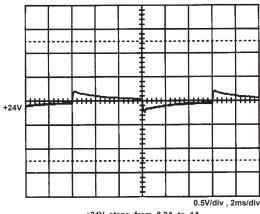
4. Output turn off wave form



5. Hold-up time



6. +24V step response

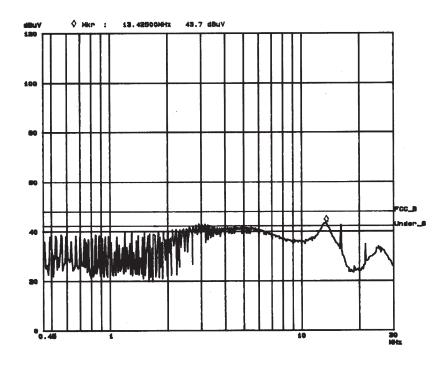


+24V steps from 0.2A to 1A

-James-

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## 7. FCC B



### 8. EN55022 B

