

**RWS100B**

SPECIFICATIONS

CA807-01-01

ITEMS		MODEL	RWS100B-5	RWS100B-12	RWS100B-24	RWS100B-48
1	Nominal Output Voltage	V	5	12	24	48
2	Maximum Output Current	A	14	8.5	4.5	2.1
3	Maximum Output Power	W	70	102	108	100.8
4	Efficiency (Typ) (*1)(*11)	100VAC	77	82	85	85
		200VAC	79	84	87	87
5	Input Voltage Range (*2)(*11)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC			
6	Input Current (Typ) (*1)(*11)	A	1.0/0.5		1.3/0.7	
7	Inrush Current (Typ) (*1)(*3)(*11)	-	15A at 100VAC, 30A at 200VAC, Ta=25°C, Cold Start			
8	PFHC	-	Designed to meet IEC61000-3-2			
9	Power Factor (Typ) (*1)(*11)	-	0.95/0.90			
10	Output Voltage Range	V	4.50 - 5.75	10.8 - 13.8	21.6 - 27.6	43.2 - 52.8
11	Maximum Ripple & Noise (*4)	0≤Ta<70°C	120	150	150	200
		-10≤Ta<0°C	160	180	180	300
12	Maximum Line Regulation (*5)(*11)	mV	20	48	96	192
13	Maximum Load Regulation (*6)(*11)	mV	40	96	192	384
14	Temperature Coefficient	-	Less than 0.02% / °C			
15	Over Current Protection (*7)	A	14.7 -	8.93 -	4.73 -	2.21 -
16	Over Voltage Protection (*8)	V	6.0 - 7.0	14.4 - 16.8	28.8 - 33.6	55.2 - 64.8
17	Hold-up Time (Typ) (*12)	-	20ms			
18	Leakage Current (*9)	-	Less than 0.75mA			
19	Parallel Operation	-	-			
20	Series Operation	-	Possible			
21	Operating Temperature (*10)(*11)	-	-10 - +70°C (-10 - +40°C:100%, +70°C:20%)			
22	Operating Humidity	-	30 - 90%RH (No Condensing)			
23	Storage Temperature	-	-30 - +75°C			
24	Storage Humidity	-	10 - 90%RH (No Condensing)			
25	Cooling	-	Convection Cooling			
26	Withstand Voltage	-	Input - FG : 2kVAC (20mA), Input - Output : 3kVAC (20mA) Output - FG : 500VAC (100mA) for 1min			
27	Isolation Resistance	-	More than 100MΩ at 25°C and 70%RH Output to FG : 500VDC			
28	Vibration	-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s <sup>2</sup> Constant, X,Y,Z 1hour each.			
29	Shock	-	Less than 196.1m/s <sup>2</sup>			
30	Safety	-	Approved by UL60950-1, UL508 (5V,12V,24V), CSA60950-1, CSA C22.2 No.107.1-01. (5V,12V,24V), CE Mark (Based on EN60950-1). Designed to meet Den-an Appendix 8 at 100VAC only.			
31	Conducted Emission (*13)	-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B			
32	Radiated Emission (*13)	-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B			
33	Immunity (*13)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11			
34	Weight (Typ)	g	400			
35	Size (W x H x D)	mm	94 x 39 x 108 ( Refer to Outline Drawing )			

\*Read instruction manual carefully, before using the power supply unit.

=NOTES=

- \*1. At 100VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*2. For cases where conformance to various safety specs (UL, CSA, ) are required, to be described as 100 - 240VAC(50-60Hz).
- \*3. Not applicable for the inrush current to Noise Filter for less than 0.2ms.
- \*4. Please refer to Fig. A for measurement of Vo, line & load regulation and ripple voltage.
- \*5. 85 - 265VAC, constant load.
- \*6. No load-Full load, constant input voltage.
- \*7. 5V - 12V model: Constant current limit and hiccup with automatic recovery.  
24V - 48V model: Constant current limit with automatic recovery.  
Avoid to operate at over load or short circuit condition.
- \*8. OVP circuit will shut down output, manual reset (Re power on).
- \*9. Measured by the each measuring method of UL, CSA, and Den-an (at 60Hz), Ta=25°C.
- \*10. Output Derating
  - Derating at standard mounting. Refer to LOAD vs. AMBIENT TEMPERATURE (CA807-01-02 ).
  - Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum load.
- \*11. Output derating needed when input voltage less than 110VAC. Refer to LOAD vs. INPUT VOLTAGE (CA807-01-02 ).
- \*12. At 110VAC/200VAC, Ta=25°C, nominal output voltage and maximum output power.
- \*13. The power supply is considered a component which will be installed into a final equipment.  
The final equipment should be re-evaluated that it meets EMC directives.

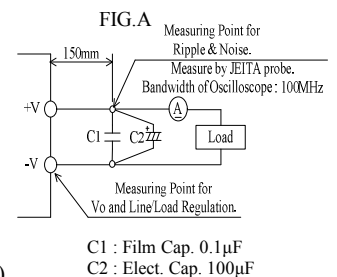


FIG.A  
C1 : Film Cap. 0.1µF  
C2 : Elect. Cap. 100µF

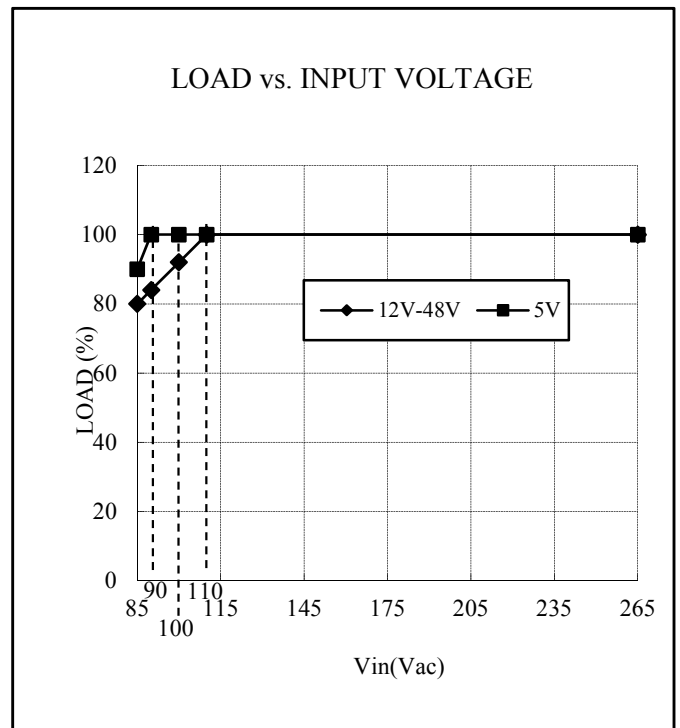
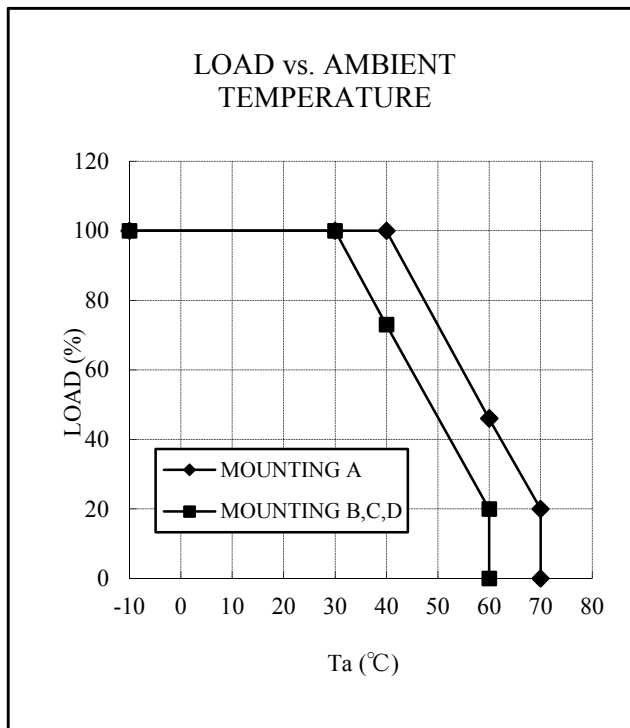
**RWS100B**

OUTPUT DERATING

CA807-01-02

Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B,C,D
-10 - +30	100	100
40	100	73
60	46	20
70	20	0

INPUT VOLTAGE (VAC)	LOAD (%)	LOAD (%)
	12V - 48V	5V
85	80	90
90	84	100
100	92	100
110 - 265	100	100



MOUNTING A

MOUNTING B

MOUNTING C

MOUNTING D

DON'T USE

(STANDARD MOUNTING)

