

RWS100B**SPECIFICATIONS**

CA807-01-01E

ITEMS		MODEL		RWS100B -5	RWS100B -12	RWS100B -15	RWS100B -24	RWS100B -48
1	Nominal Output Voltage	V		5	12	15	24	48
2	Maximum Output Current	A		14	8.5	6.8	4.5	2.1
3	Maximum Output Power	W		70	102	102	108	100.8
4	Efficiency (Typ) (*1)(*11)	100/115VAC 200/230VAC	%	77/77.5	82/83	83/84	85/86	85/86
5	Input Voltage Range	(*)2)(*11)	-	85 - 265VAC (47 - 63Hz) or 120 - 370VDC				
6	Input Current (Typ) (*1)(*11)	100/115VAC 200/230VAC	A	1.0/0.9 0.5/0.45		1.3/1.2 0.7/0.6		
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 at 100VAC, 0.90 at 200VAC				
10	Output Voltage Range	V		4.50 - 5.75	10.8 - 13.8	13.5 - 17.25	21.6 - 27.6	43.2 - 52.8
11	Maximum Ripple & Noise (*4)	0<Ta<70°C -20<Ta<0°C	mV	120 160	150 180	150 180	150 180	200 300
12	Maximum Line Regulation	(*5)(*11)	mV	20	48	60	96	192
13	Maximum Load Regulation	(*6)(*11)	mV	40	96	120	192	384
14	Temperature Coefficient		-	Less than 0.02% / °C				
15	Over Current Protection	(*7)	A	14.7 -	8.93 -	7.14 -	4.73 -	2.21 -
16	Over Voltage Protection	(*8)	V	6.0 - 7.0	14.4 - 16.8	18.0 - 21.0	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)	-	-20 - +70°C (-20°C: 50%, -10 - +45°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/s² Constant, X,Y,Z 1hour each.				
29	Shock		-	Less than 196.1m/s²				
30	Safety		-	Approved by UL62368-1, CSA62368-1, EN62368-1, UL60950-1, CSA60950-1, EN60950-1 (Expire date of 60950-1 : 20/12/2020) UL508 (5V,12V,24V), CSA C22.2 No.107.1-01. (5V,12V,24V). Designed to meet Den-an Appendix 8 at 100VAC only.				
31	Line DIP		-	Designed to meet SEMI-F47 (200VAC Line only)				
32	Conducted Emission	(*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
33	Radiated Emission	(*13)	-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B				
34	Immunity	(*13)	-	Designed to meet IEC61000-6-2 IEC61000-4-2, -3, -4, -5, -6, -8, -11				
35	Weight (Typ)	g		400				
36	Size (W x H x D)	mm		39 x 94 x 108 (Refer to Outline Drawing)				

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

=NOTES=

*1. At Ta=25°C, nominal output voltage and maximum output power.

*2. For cases where conformance to various safety specs (UL, CSA, EN) 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 - 15V 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, EN 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.

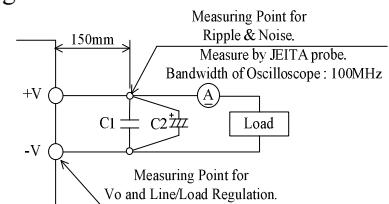
*11. Output derating needed when input voltage less than 110VAC. Refer to LOAD vs. INPUT VOLTAGE (CA807-01-02_).

*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

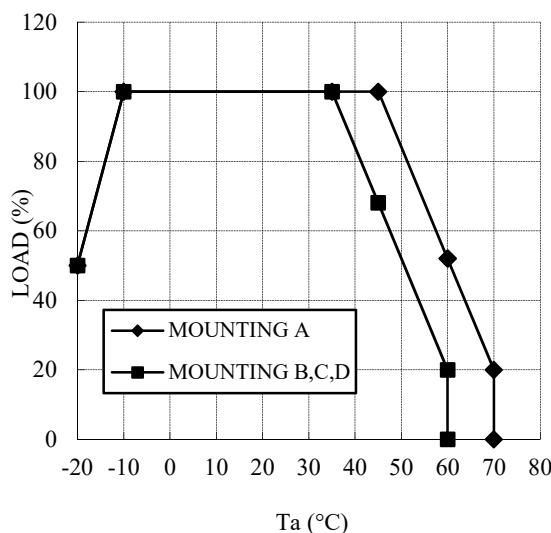
OUTPUT DERATING

CA807-01-02A

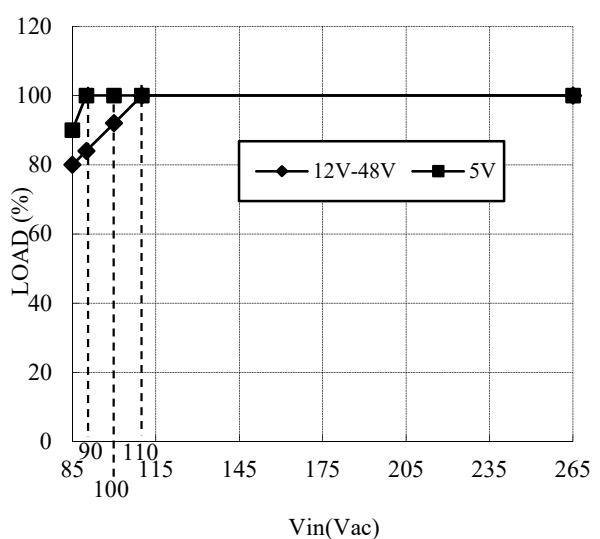
Ta (°C)	LOAD (%)	
	MOUNTING A	MOUNTING B,C,D
-20	50	50
-10 - +35	100	100
45	100	68
60	52	20
70	20	0

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

LOAD vs. AMBIENT TEMPERATURE



LOAD vs. INPUT VOLTAGE



MOUNTING A
(STANDARD MOUNTING)

MOUNTING B

MOUNTING C

MOUNTING D

DON'T USE

