

**DRB50-1****SPECIFICATIONS**

CA800-01-01B

ITEMS	MODEL	DRB50-5-1	DRB50-12-1	DRB50-24-1	DRB50-48-1
1 Nominal Output Voltage	V	5	15	24	48
2 Maximum Output Current	A	6	3.4	2.1	1.05
3 Maximum Output Power	W	30	51	50.4	50.4
4 No Load Input Power related to Erp (115/230VAC)	W	0.5		0.3	0.5
5 Efficiency (Typ) (115/230VAC) (*1)	%	79 / 80	88 / 90	88 / 90	90 / 91
6 Active Average Efficiency related to Erp (115/230VAC)	%	-	89 / 88	88.5 / 87	89 / 87
7 Input Voltage Range (*2)	—	85 ~ 264VAC(47~63Hz) or 120 ~ 373VDC(withstand 300VAC surge for 5 seconds)			
8 Input Current (Typ) (115/230VAC) (*1)	A		0.9 / 0.55		
9 Inrush Current (Typ) (230VAC) (*3)	—		50A Cold start		
10 PFHC	—		Designed to meet IEC61000-3-2		
11 Power Factor (Typ) (115/230VAC) (*1)	—		0.6 / 0.5		
12 Output Voltage Range	V	5.0 ~ 5.5	12.0 ~ 15.0	24.0 ~ 28.0	48.0 ~ 52.8
13 Ripple and Noise (Typ) (*1,4)	mV	30	20	30	40
Ripple and Noise (Max) (*4)	0<Ta≤70°C	120		240	480
	-20≤Ta≤0°C	170			
14 Line Regulation (*4,5)	mV	50	150	240	480
15 Load Regulation (*4,6)	mV	50	150	240	480
16 Transient Response Deviation(25~75% load change)	mV	250	750	1200	2400
17 Transient Response Recovery Time	ms		1, to within 2%of settled value, 25~75% load change		
18 Temperature Coefficient	—		Less than ±0.02%/°C		
19 Over Current Protection (*7)	A		105%-		
20 Over Voltage Protection (*8)	V	5.75 ~ 6.75	16.0 ~ 18.8	30.0 ~ 35.0	54.0 ~ 68.0
21 Hold-Up Time (Typ) (*1)	—		20ms(TYP.) @ 100VAC input voltage, full load, Ta=25°C		
22 Leakage current (*9)	—		Less than 1.5mA at 240VAC .		
23 Indication	—		DC O.K. LED (Green)		
24 Parallel Operation	—		No		
25 Series Operation	—		Possible		
26 Operating Temperature (*10)	—		-20 ~ +70°C -20°C:50%, -10°C ~ +55°C:100%, +70°C:50%		
27 Operating Humidity	—		5 ~ 95 %RH (No condensing)		
28 Operating Altitude	m		3000		
29 Storage Temperature (*11)	—		-40 ~ +85°C		
30 Storage Humidity	—		5 ~ 95 %RH (No condensing)		
31 Cooling	—		Convection		
32 Withstand Voltage	—		Input - Output : 3.0kVAC (20mA), Input - FG : 1.5kVAC (20mA) Output - FG : 500VAC (100mA) 1 min.		
33 Isolation Resistance	—		Input - FG, Input - Output and Output - FG: More than 100MΩ (500VDC) at 25°C and 70%RH		
34 Vibration	—		At no operating, 10~55Hz(sweep for 1 min.):19.6 m/s²(2G) Constant, X,Y,Z each 1 hour		
35 Shock (In package)	—		294m/s²(30G) 11ms half sine		
36 Pollution	—		Degree 2, material group 3		
37 Safety	—		Approved by UL60950-1, CSA22.2 No.60950-1-07(2nd edition), EN60950-1, UL508		
38 Line Dip	—		Designed to meet SEMI-F47 (200VAC line only)		
39 EMI	—		Designed to meet EN55022-B,CISPR22-B		
40 Immunity	—		Designed to meet EN61000-4-2 (Level 4), -3 (Level 3), -4 (Level 4), -5 (Level 3 , Level 4), -6 (Level 3), -8 (Level 4), -11(class 3)		
41 Weight (Typ)	g		175		
42 Dimension (W x H x D)	mm		30 x 75 x 90 (Refer to Outline Drawing)		

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

= NOTES=

\* 1 : At Maximum Output Power, nominal input voltage, Ta = 25°C.

\* 2 : For cases where conformance to various safety specs ( UL, CSA, EN ) are required, to be described as 100 ~ 240VAC, 50 / 60Hz on name plate.

\* 3 : Not applicable for the in-rush current to Noise Filter for less than 0.2ms.

\* 4 : Please refer to Fig A for measurement of line &amp; load regulation, ripple and noise voltage.

Ripple &amp; noise are measured at 20MHz by using a twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.

\* 5 : 85 ~ 264VAC, constant load.

\* 6 : No load - Full load ( Maximum power ), constant input voltage.

\* 7 : Output hiccup with automatic recovery.

Avoid to operate at overload or dead short for more than 30 seconds.

\* 8 : OVP circuit will shutdown output, manual reset (Re-power on).

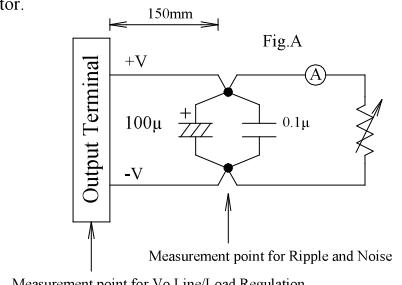
\* 9 : Measured by each measuring method of UL and EN(at 60Hz), Ta=25°C.

\* 10 : Refer to Output Derating Curve(CA800-01-02) for details of output derating versus ambient temperature.

- Load (%) is percent of Maximum Output Power and Maximum Output Current ( Item 2 and 3 ).

Do not exceed derating of Maximum Output Power and Maximum Output Current.

\*11 Refer to Output Derating Curve(CA800-01-02) for low temperature start up capability.



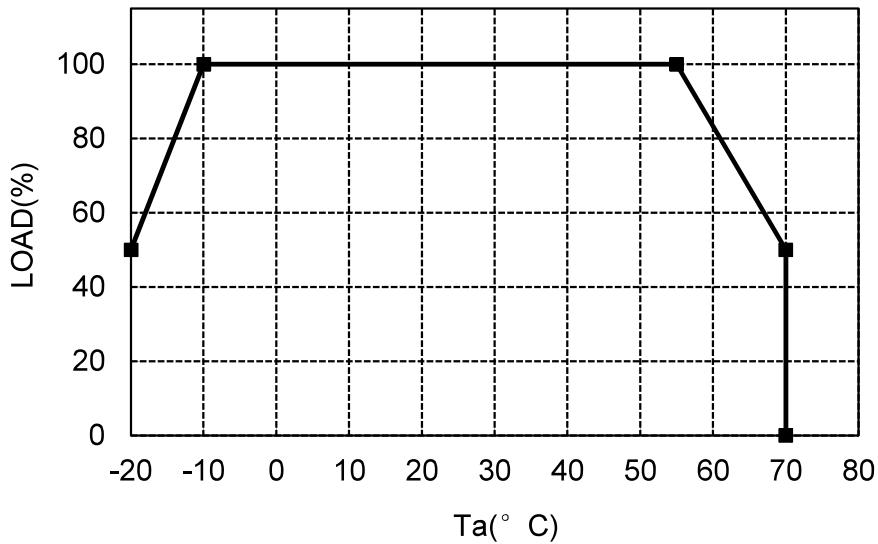
**DRB50-1**

## OUTPUT DERATING

CA800-01-02

Ta(°C)	LOAD(%)
-20	50%
-10~55	100%
70	50%

## OUTPUT DERATING CURVE

**Standard Mounting**