

VS50B**SPECIFICATIONS**

A148-01-01D

MODEL			VS50B-3	VS50B-5	VS50B-12	VS50B-15	VS50B-24		
ITEMS									
1	Nominal Output Voltage	V	3.3	5.0	12.0	15.0	24.0		
2	Minimum Output Current	A	0	0	0	0	0		
3	Average Output Current	A	10.0	10.0	4.3	3.5	2.5		
4	Peak Output Current (*1)	A	12.0	12.0	5.16	4.2	3.0		
5	Average Output Power	W	33.0	50.0	51.6	52.5	60.0		
6	Peak Output Power (*1)	W	39.6	60.0	61.92	63.0	72.0		
7	Efficiency (Typ) (*2)	%	73.0	78.0	79.0	80.0	80.0		
8	Input Voltage Range (*3)	-	85-132VAC (47-440Hz) or 110-175VDC						
9	Input Current (Typ) (*2)	-	1.0A	1.2A			1.4A		
10	Inrush Current (Typ)	-	30A at 100VAC, cold start Ta=25°C						
11	Output Voltage Range	-	+/-10%						
12	Maximum Ripple & Noise (*4)	mV	120	120	150	150	200		
13	Maximum Line Regulation (*4,5)	mV	20	20	48	60	96		
14	Maximum Load Regulation (*4,6)	mV	40	40	96	120	150		
15	Maximum Temperature Drift (*4,7)	mV	50	50	120	150	240		
16	Over Current Protection (*8)	-	125% ~						
17	Over Voltage Protection (*9)	-	115% ~ 135%						
18	Hold-Up Time (Typ) (*2)	-	17ms at 50W						
19	Parallel Operation	-	-						
20	Series Operation	-	Possible						
21	Operating Temperature (*10)	-	-10 ~ 50°C: 100%, 60°C: 70%,				40°C:100%, 50°C:88%, 60°C: 62%		
22	Operating Humidity	-	30 ~ 90%RH						
23	Storage Temperature	-	-30 ~ 85°C						
24	Storage Humidity	-	10 ~ 95%RH						
25	Cooling	-	Convection Cooling						
26	Withstand Voltage	-	Input-Output : 2kVAC(20mA), Input-FG : 2kVAC(20mA) Output-FG : 500VAC(100mA) 1min.						
27	Isolation Resistance	-	More than 100M ohm at 25°C and 70%RH Output-FG 500VDC						
28	Vibration	-	10-55Hz Amplitude (sweep 1min) Less than 19.6m/s ² X,Y,Z 1h each						
29	Shock	-	Less than 196.1m/s ²						
30	Safety	-	Built to meet UL1950, CSA234 & DENTORI						
31	Conducted Noise	-	Built to meet VCCI-B & FCC class B						
32	Weight (Typ)	-	200g						
33	Size (WxHxD)	mm	50 x 25 x 195						

==NOTES==

- *1. Operating time at peak output is less than 10sec. (Duty=0.35)
- *2. At 100VAC and Average Output Power, Ta=25°C.
- *3. For cases where conformance to various safety specs (UL, CSA) are required to be described as 100-120VAC, 50/60Hz on name plate.
- *4. Please refer to Fig A for measurement determination of line & load regulation and output ripple voltage.
- *5. From 85-132VAC, constant load.
- *6. From Min load - Full load (Average power), constant input voltage.
- *7. From -10 ~ +50°C constant input voltage and load.
- *8. Current limiting with automatic recovery. Avoid to operate over load or dead short for 30 seconds.
- *9. OVP circuit will shutdown output, manual reset.
- *10. At standard mounting method, Fig B.

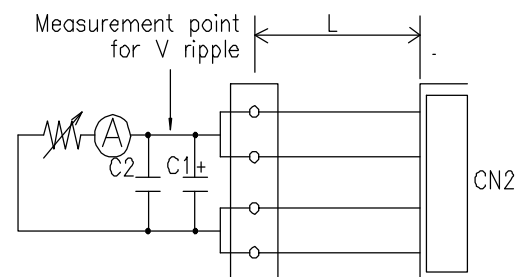


Fig.A L:150mmAWG#18
C1:Elec.Cap 100uF
C2:Film Cap 0.1uF

Measurement point for Vo,
Line/Load Regulation.

Bandwidth of scope:20MHz



Fig.B

VS50B

OUTPUT DERATING

A148-01-02

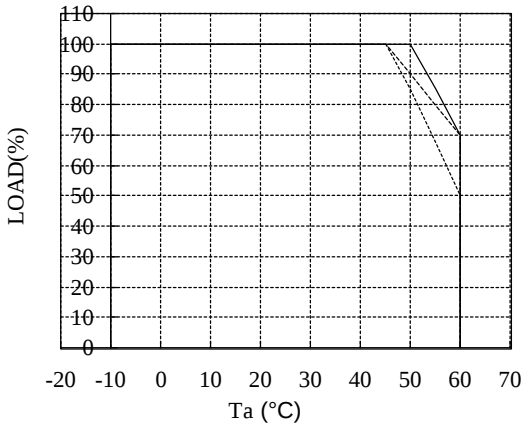
(3, 5, 12, 15V)

Ta (°C)	LOAD (%)				
	MOUNTING : A	MOUNTING : B	MOUNTING : C	MOUNTING : D	MOUNTING : E
-10 - +25	100	100	100	100	100
45	100	100	100	100	100
50	100	85	85	90	85
55	85	67.5	67.5	79.5	67.5
60	70	50	50	70	50

(24V)

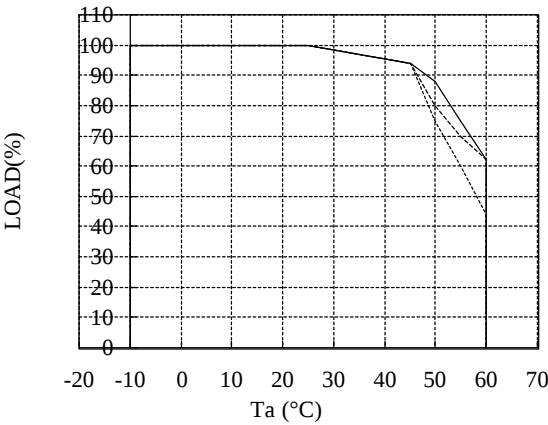
Ta (°C)	LOAD (%)				
	MOUNTING : A	MOUNTING : B	MOUNTING : C	MOUNTING : D	MOUNTING : E
-10 - +25	100	100	100	100	100
45	94	94	94	94	94
50	88	75	75	80	75
55	75	60	60	70	60
60	62	44	44	62	44

OUTPUT DERATING CURVE
(3V, 5V, 12V, 15V)



—— MOUNTING : A
..... MOUNTING : B,C,E
----- MOUNTING : D

OUTPUT DERATING CURVE
(24V)



—— MOUNTING : A
..... MOUNTING : B,C,E
----- MOUNTING : D

MOUNTING : A MOUNTING : B MOUNTING : C MOUNTING : D MOUNTING : E DONT USE
(STANDARD MOUNTING)

