

SPECIFICATIONS

A152-01-01D

MODEL			ZWS5-3	ZWS5-5	ZWS5-12	ZWS5-15	ZWS5-24
ITEMS							
1	Nominal Output Voltage	V	3.3	5	12	15	24
2	Minimum Output Current	A	0	0	0	0	0
3	Maximum Output Current	A	1.0	1.0	0.42	0.34	0.22
4	Maximum Peak Output Current (*1)	A	1.2	1.2	0.51	0.41	0.27
5	Maximum Output Power	W	3.3	5.0	5.04	5.1	5.28
6	Maximum Peak Output Power (*1)	W	3.96	6.0	6.048	6.12	6.336
7	Efficiency (Typ) (*2)	%	62	67	68	68	70
8	Input Voltage Range (*3)	-	85 - 265VAC (47 - 440Hz) or 110 - 330VDC				
9	Input Current(Typ)	-	0.14A at 100VAC, 0.07A at 200VAC				
10	Inrush Current(Typ)	-	15A at 100VAC, 30A at 200VAC, Ta=25°C, Cold Start				
11	Output Voltage Range	-	+/-10%				
12	Maximum Ripple & Noise (*10)	0~+60°C	mV	120	120	150	150
		-10~0°C	mV	160	160	180	180
13	Maximum Line Regulation (*4,10)	mV	20	20	48	60	96
14	Maximum Load Regulation (*5,10)	mV	40	40	96	120	150
15	Maximum Temperature Drift (*6)	mV	60	60	140	180	280
16	Over Current Protection (*7)	-	125% ~				
17	Over Voltage Protection (*8)	-	140% ~				
18	Hold-up Time (Typ) (*2)	-	17ms at 100VAC, 5W, Ta=25°C				
19	Parallel Operation	-	-				
20	Series Operation (*9)	-	Possible				
21	Operating Temperature (*11)	-	-10°C ~ +50°C : 100%, +60°C : 70%				
22	Operating Humidity	-	30 ~ 90%RH				
23	Storage Temperature	-	-30°C ~ +85°C				
24	Storage Humidity	-	10 ~ 95%RH				
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 - FG 500VDC				
28	Vibration	-	10-55Hz(Sweep 1min) Less than 19.6m/s ² X,Y,Z 1h each				
29	Shock	-	Less than 196.1m/s ²				
30	Safety	-	Approved by UL60950-1,CSA60950-1,EN60950-1, Built to meet DENAN				
31	Conducted Noise	-	Built to meet EN55022-B, FCC-ClassB, VCCI-B				
32	Weight (Typ)	g	120				
33	Size (W.H.D)	mm	45 x 21 x 98				

=NOTES=

- *1. Operating time at peak output is less than 10 seconds. (Duty=0.35)
- *2. At 100VAC and maximum output current, Ta=25°C.
- *3. For cases where conformance to various safety specs (UL,CSA) are required, to be described as 100 - 240VAC, 50/60Hz on name plate.
- *4. From 85 - 265VAC and constant load.
- *5. From Min load - Full load (Maximum Power) and constant input voltage.
- *6. From -10 ~ +50°C constant input voltage and load.
- *7. Current limiting with automatic recovery. Avoid to operate over load or dead short for 30 seconds.
- *8. Over voltage clamping by Zener Diode.
- *9. Refer to Instruction Manual.
- *10. Please refer to Fig A for measurement of line & load regulation and ripple voltage.
- *11. At standard mounting method, Fig B.

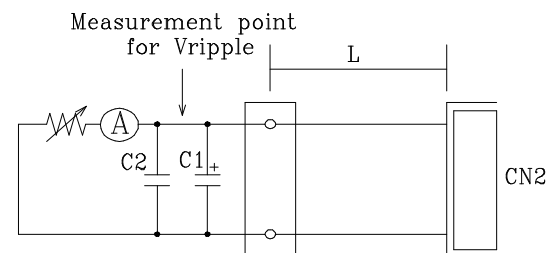


Fig.A L:150mmAWG#22
 C1:Elec.Cap 100uF
 C2:Film Cap 0.1uF
 Measurement point for Vo, Line/Load Regulation.
 Bandwidth of scope:100MHz

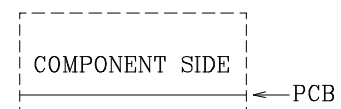


Fig.B

ZWS 5

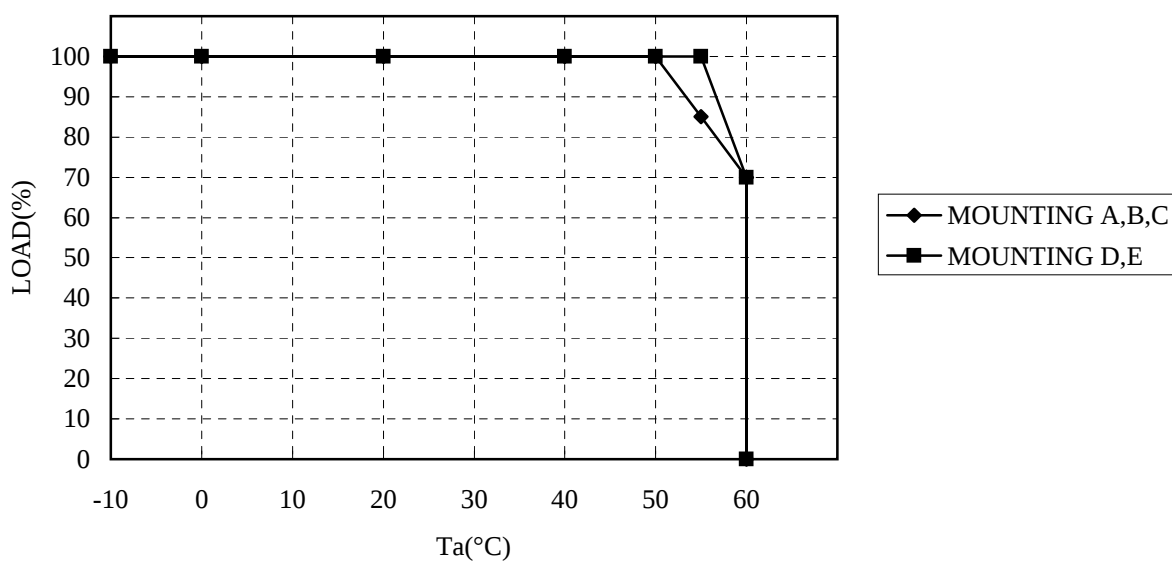
OUTPUT DERATING

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COOLING : CONVECTION COOLING

Ta(°C)	LOAD(%)				
	MOUNTING A	MOUNTING B	MOUNTING C	MOUNTING D	MOUNTING E
-10 ~+50	100	100	100	100	100
55	85	85	85	100	100
60	70	70	70	70	70

OUTPUT DERATING CURVE



MOUNTING A

MOUNTING B

MOUNTING C

MOUNTING D

MOUNTING E

DON'T USE

(STANDARD MOUNTING)

