VS30C

SPECIFICATIONS

CA711-01-01E

	ITEMS / MODEL			VS30C-3	VS30C-5	VS30C-12	VS30C-15	VS30C-24	VS30C-36	VS30C-48
1	Nominal Output Voltage		V	3.3	5	12	15	24	36	48
2	Minimum Output Current		A	0	0	0	0	0	0	0
3	Maximum Output Current		A	6.0	6.0	2.5	2.0	1.3	0.9	0.7
4	Maximum Output Power		W	19.8	30.0	30.0	30.0	31.2	32.4	33.6
5	Efficiency (Typ)	(* 1)	%	69	75	80	81	82	80	80
6	Input Voltage Range	(* 2)	-	85-132VAC (47-440Hz) or 110-175VDC						
7	Input Current (Typ)	(* 1)	-	0.7A						
8	Inrush Current (Typ)		-	25A at 100VAC, cold start Ta=25°C						
9	Output Voltage Range		-	± 10%						
10	Maximum Ripple & Noise	(* 3)	mV	120	120	150	150	200	300	400
11	Maximum Line Regulation	(*3,4)	mV	20	20	48	60	96	144	192
12	Maximum Load Regulation	(*3,5)	mV	40	40	96	120	150	240	300
13	Maximum Temperature Drift	(*3,6)	mV	50	50	120	150	240	360	480
14	Over Current Protection	(* 7)	-	105% ~						
15	Over Voltage Protection	(* 8)	-	115% ~						
16	Hold-up Time (Typ)	(* 1)	-	20ms at 30W						
17	Parallel Operation		-	-						
18	Series Operation		-	Possible						
19	Operating Temperature	(* 9)	-	-10 ~ +50°C: 100%, +60°C: 70%						
20	Operating Humidity		-	30 ~ 90% RH						
21	Storage Temperature		-	-30 ~ 85°C						
22	Storage Humidity		-	10 ~ 95% RH						
23	Cooling		-	Convection Cooling						
24	Withstand Voltage		-	Input-Output: 2kVAC (20mA), Input-FG: 2kVAC (20mA) Output-FG: 500VAC (100mA) 1min						
25	Isolation Resistance		-	More than 100MΩ at 25°C and 70% RH Output-FG 500VDC						
26	Vibration		-	10-55Hz Amplitude (sweep 1min) Less than 19.6m/s^2 X, Y, Z 1h each						
27	Shock		-	Less than 196.1m/s^2						
28	Safety		-	Approved by UL62368-1,CSA62368-1,EN62368-1, UL60950-1, CSA60950-1, Designed to meet DENAN						
29	Conducted Noise		-	Designed to meet VCCI-B & FCC-B						
30	Weight (Typ)		-	150g						
31	Size (W*H*D)		mm	50*25*132.5						

NOTES:

* 1. At 100VAC and Maximum Output Power, Ta=25°C.
* 2. For cases where conformance to various safety specs (UL, CSA, EN) are required to be described as 100-120VAC, 50/60Hz on name plate.
* 3. Please refer to Fig A for measurement determination of line & load regulation and output ripple voltage. (Measure with JEITA RC-9131 probe)
* 4. From 85-132VAC, constant load.
* 5. From Min load - Full load (Maximum power), 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. At standard mounting method, Fig B.

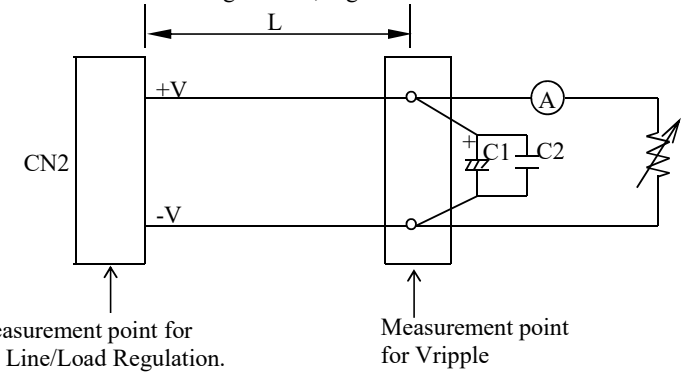

Fig A L: 150mm AWG#18
C1: Elec. Cap 100μF
C2: Film Cap 0.1μF
Bandwidth of scope: 100MHz

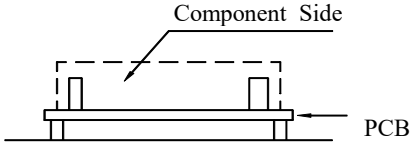

Fig B

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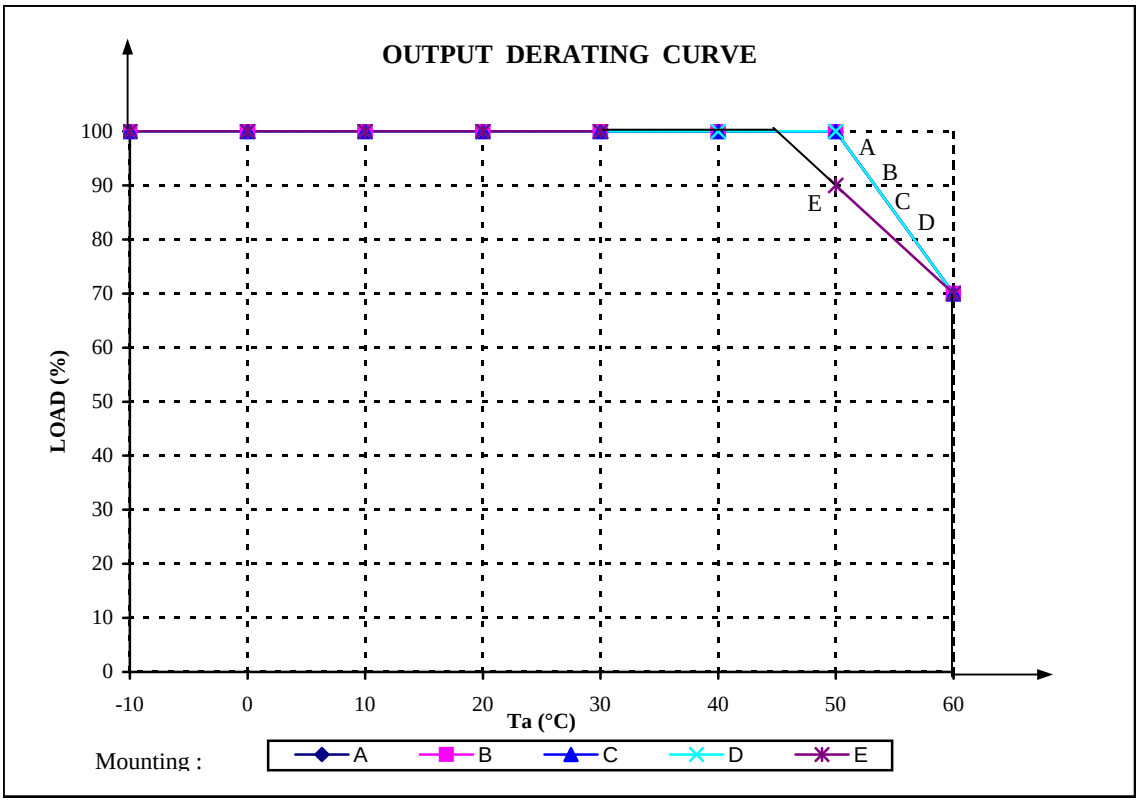
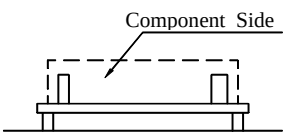
OUTPUT DERATING (CONVECTION COOLING)

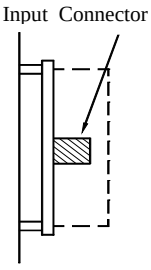
Ta (°C)	LOADING CONDITION (%)				
	Mounting A	Mounting B	Mounting C	Mounting D	Mounting E
-10	100	100	100	100	100
0	100	100	100	100	100
20	100	100	100	100	100
40	100	100	100	100	100
50	100	100	100	100	90
60	70	70	70	70	70



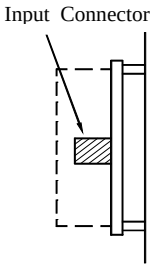
Mounting A



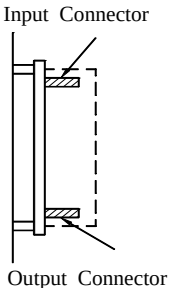
Mounting B



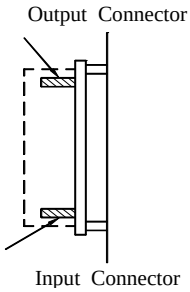
Mounting C



Mounting D



Mounting E



VS30C **OUTPUT DERATING** (FORCED AIR COOLING)

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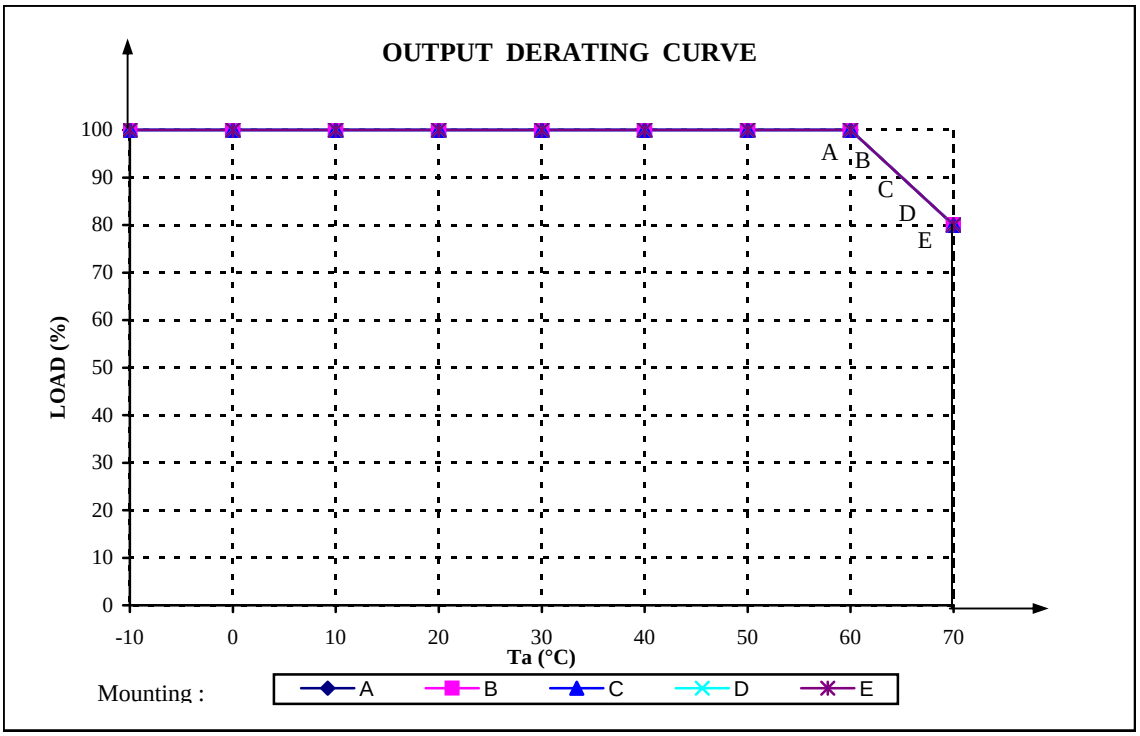
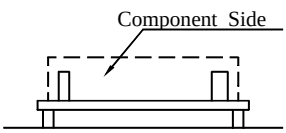
* COOLING: FORCED AIR COOLING

Ta (°C)	LOADING CONDITION (%)				
	Mounting A	Mounting B	Mounting C	Mounting D	Mounting E
-10	100	100	100	100	100
0	100	100	100	100	100
20	100	100	100	100	100
40	100	100	100	100	100
50	100	100	100	100	100
60	100	100	100	100	100
70	80	80	80	80	80

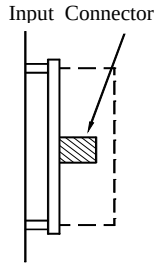
RECOMMENDED AIR VELOCITY: 0.7m/s (MEASURED AT COMPONENT SIDE OF PCB.
AIR MUST FLOW THROUGH COMPONENT SIDE)



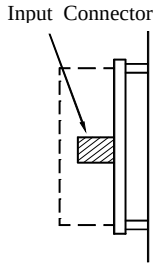
Mounting A



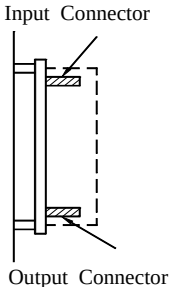
Mounting B



Mounting C



Mounting D



Mounting E