CUS15E

SPECIFICATIONS

CA826-01-01/E-A

	ITEMS / MODEL			CUS15E -5	CUS15E -12	CUS15E -24
1	Nominal Output Voltage		V	5	12	24
2	Maximum Output Current		A	3.0	1.3	0.7
3	Maximum Output Power		W	15.0	15.6	16.8
4	Efficiency @ DC input (Typ)	110/220VDC(*1)	%	77 / 80	80 / 83	82 / 85
	Efficiency @ AC input (Typ)	115/230VAC(*1)	%	76 / 78	80 / 83	82 / 85
5	Input Voltage Range	(*2)(*12)	-	85- 265VAC(47-440Hz) or 88- 370VDC		
6	Input Current @DC input (Typ)	110/220VDC(*1)	A	0.18 / 0.09		
	Input Current @AC input (Typ)	115/230VAC(*1)	A	0.34 / 0.17		
7	Inrush Current @ DC input (Typ)	110/220VDC(*1)(*3)	-	10A / 20A at Cold Start		
	Inrush Current @ ACinput (Typ)	115/230VAC(*1)(*3)	-	15A / 30A at Cold Start		
8	Adjustable Output Voltage Range		V	4.75 - 5.25	11.4 - 12.6	22.8 - 25.2
9	Maximum Ripple & Noise (*4)(*5)	0≤Ta≤70°C, 35-100% Load	mV	120	150	150
		-20≤Ta<0°C, 35-100% Load	mV	160	180	180
		-20<Ta<70°C, 0~35% Load	mV	200	240	240
10	Maximum Line Regulation	(*4)(*6)	mV	20	48	96
11	Maximum Load Regulation	(*4)(*7)	mV	40	96	150
12	No Load Power Consumption		-	<0.5W@230VAC & 220VDC,Nominal Output Voltage		
13	Temperature Coefficient	(*4)	-	Less than 0.02% / °C		
14	Over Current Protection	(*8)	A	>3.15	>1.37	>0.74
15	Over Voltage Protection	(*9)	V	5.75 - 7.00	13.8 - 16.2	27.6 - 32.4
16	Hold-up Time @ DC input (Typ)	110/220VDC(*1)	-	10ms / 70ms		
	Hold-up Time @ AC input (Typ)	115/230VAC(*1)	-	20ms / 130ms		
17	Leakage Current	(*10)	-	0.15/0.30mA Max. (100VAC / 230VAC 60Hz)		
18	Remote Control		-	-		
19	Parallel Operation		-	-		
20	Series Operation		-	Possible		
21	Operating Temperature	(*11)	-	Convection : -20 - +70°C ,start up at -40°C is possible		
22	Operating Humidity		-	10 - 90%RH (No Condensing)		
23	Storage Temperature		-	-40 - +85°C		
24	Storage Humidity		-	10 - 90%RH (No Condensing)		
25	Cooling		-	Convection		
26	Withstand Voltage		-	Input - FG : 2kVAC (5mA), Input - Output : 3kVAC (10mA) Output - FG : 500VAC (20mA) for 1min		
27	Isolation Resistance		-	More than 100MΩ at 25°C and 70%RH Output - FG : 500VDC		
28	Vibration		-	At no operating, 10 - 55Hz (Sweep for 1min) 19.6m/s^2 Constant, X,Y,Z 1hour each.		
29	Shock		-	Less than 196.1m/s^2		
30	Safety		-	Designed to meet UL60950-1		
31	EMI		-	Designed to meet EN55011/EN55032-B, FCC-B, VCCI-B		
32	Immunity		-	Designed to meet IEC61000-4-2 (Level 4), IEC61000-4-3 (Level 3), IEC61000-4-4 (Level 4), IEC61000-4-5 (Level 3,4),IEC61000-4-6 (Level 3), IEC61000-4-8 (Level 4), IEC61000-4-11		
33	Weight (Typ)		g	55		
34	Size (L x W x H)		mm	87.5 x 50 x 22 (Refer to Outline Drawing)		

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

=NOTES=

*1. At 115/230VAC & 110/220VDC, 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 in-rush 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. Ripple & noise are measured at 100MHz by using a 150mm twisted pair of load wires terminated with a 0.1uF and 100uF capacitor.

*6. 85 ~ 265VAC & 88 - 370VDC, constant load.

*7. No load-Full load, constant input voltage.

*8. Hiccup with automatic recovery.
Avoid to operate at over load or short circuit condition for more than 30seconds.

*9. OVP circuit will shut down output , manual reset (Re power on) to get output voltage.

*10. Measured by the each measuring method of UL, CSA and EN (at 60Hz), Ta=25°C.

*11. Refer to Output Derating Curve for details of output derating versus input voltage, ambient temperature and mounting method .
- Load (%) is percent of maximum output power or maximum output current, do not exceed its derating of maximum loa
- Start up at -40°C is possible. However, it may not fulfill all the specifications. Please read instruction manual for deatil information.

*12. Output Derating needed when input voltage less than 110VAC, refer to CA826-01-03/E_.

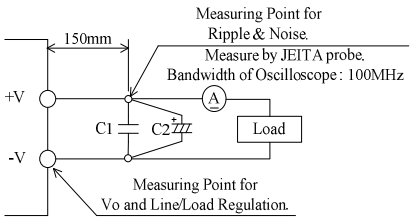

Fig. A

C1 : Film Cap. 0.1 μF
C2 : Elec. Cap. 100 μF

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OUTPUT DERATING

CA826-01-02/E

*COOLING: CONVECTION COOLING

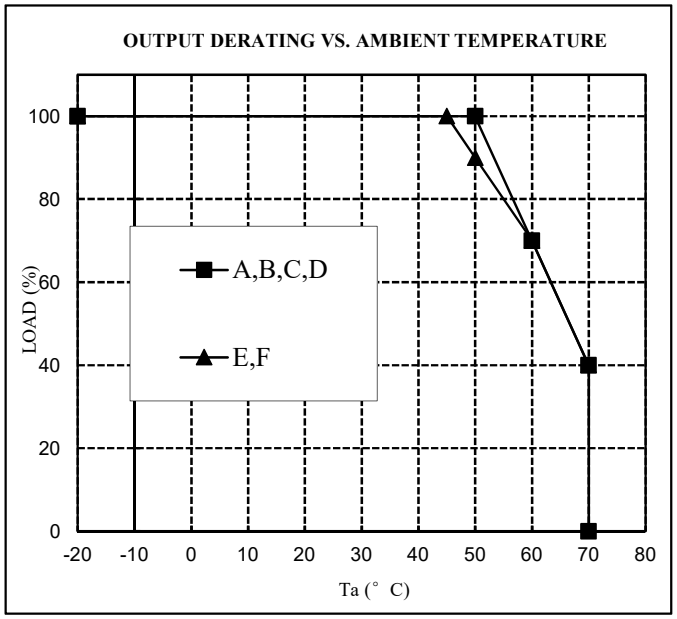
Ta (°C)	LOADING CONDITION(%)	
	Mounting A,B,C,D	Mounting E,F
-20~45	100	100
50	100	90
60	70	70
70	40	40

*COOLING: FORCED AIR COOLING

Ta (°C)	LOADING CONDITION(%)
	All Mounting (A,B,C,D,E,F)
-20~60	100
70	70

Air Velocity≥0.7m/s: Air must flow through component side.

*COOLING: CONVECTION COOLING



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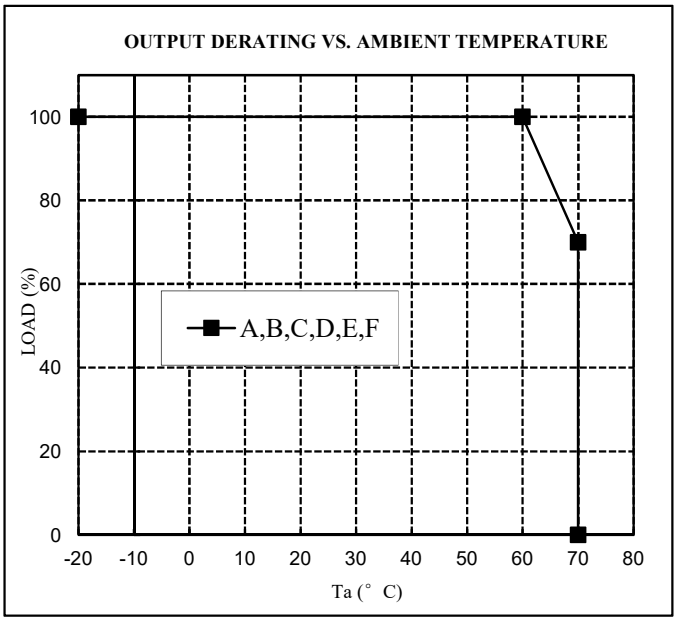
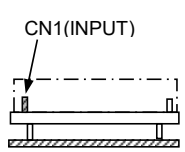
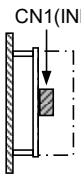
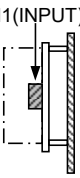
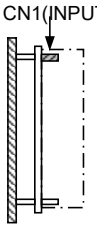
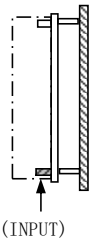
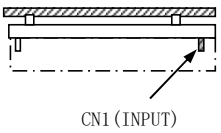


(MOUNTING A)	(MOUNTING B)	(MOUNTING C)	(MOUNTING D)	(MOUNTING E)	(MOUNTING F)
(STANDARD MOUNTING) 					

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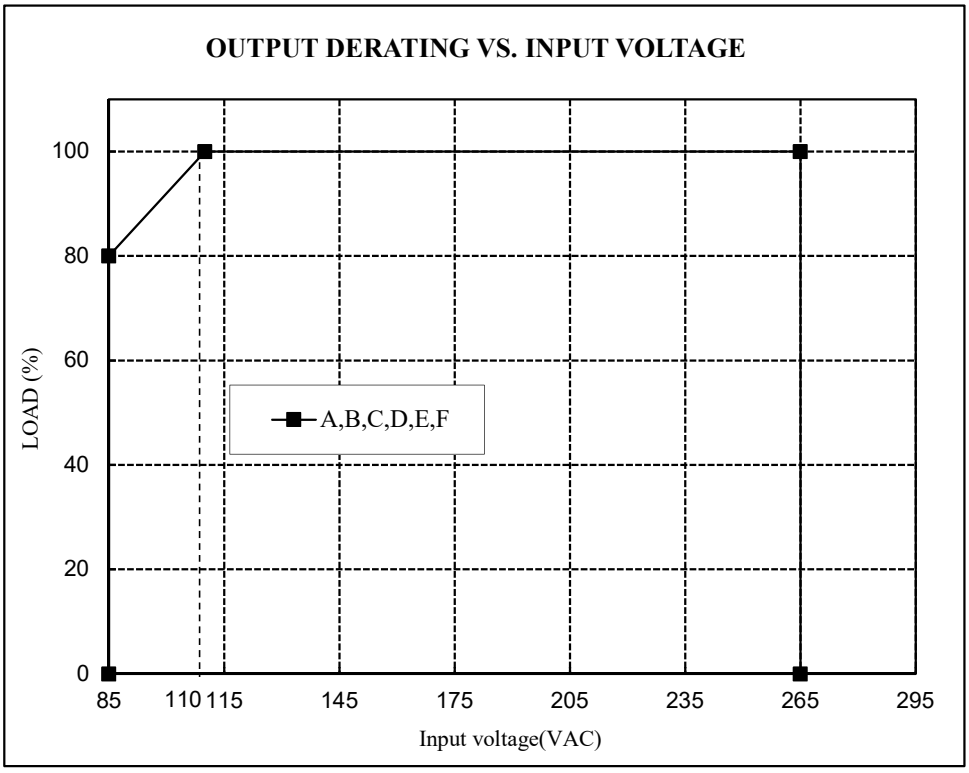
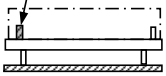
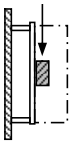
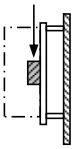
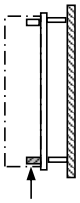
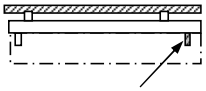
OUTPUT DERATING

CA826-01-03/E

Input voltage	LOADING CONDITION(%)
	All Mounting (A,B,C,D,E,F)
85VAC /88 DC	80
110VAC-265VAC / 120VDC-370VDC	100



(MOUNTING A)	(MOUNTING B)	(MOUNTING C)	(MOUNTING D)	(MOUNTING E)	(MOUNTING F)
(STANDARD MOUNTING) CN1(INPUT) 	CN1(INPUT) 	CN1(INPUT) 	CN1(INPUT) 	 CN1(INPUT)	 CN1(INPUT)