

CUT35

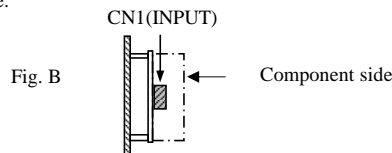
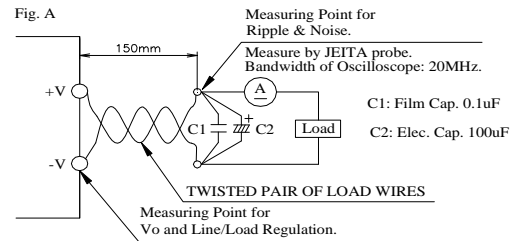
SPECIFICATIONS

CA837-01-01

ITEMS		MODEL	CUT35-522			CUT35-5FF			
			CH1	CH2	CH3	CH1	CH2	CH3	
1	Nominal Output Voltage	V	+5	+12	-12	+5	+15	-15	
2	Minimum Output Current	A	0	0	0	0	0	0	
3	Maximum Output Current	A	3.0	1.2	0.85	3.0	1.0	0.65	
4	Typical Output Current	A	3.0	1.2	0.5	3.0	1.0	0.3	
5	Maximum Output Power	W	15.0	14.4	10.2	15.0	15.0	9.75	
				20.4			19.5		
6	Maximum Total Allowable Output Power	W	35.4			34.5			
7	Efficiency (Typ)	(*8) -	81.0%			82.0%			
8	Input Voltage Range	(*2) -	85~265VAC, 47~63Hz or 88-370VDC						
9	Input Current (Typ)	(*1) -	1.0A / 0.5A						
10	Inrush Current (Typ)	(*3) -	13A / 100VAC, 32A / 230VAC (cold start, Ta=25°C)						
11	Output Voltage Range	(*12) -	V1: +5%, -0% max; V2, V3: Fixed (± 5% max)						
12	Maximum Ripple & Noise	0<Ta<70°C, 35-100% Load (*4,11) mV	120	150	150	120	150	150	
			-20<Ta<0°C, 35-100% Load mV	160	180	180	160	180	180
			-20<Ta<70°C, 0~35% Load mV	300	400	400	300	400	400
13	Maximum Line Regulation	(*5,11) mV	50	240	240	50	300	300	
14	Maximum Load Regulation	(*6,11) mV	100	600	600	100	750	750	
15	Temperature Coefficient	-	V1 less than 0.02% /°C, V2, V3 less than 0.03% /°C at -20~70°C						
16	Over Current Protection	(*7) -	More than 105%						
17	Over Voltage Protection	V	5.7~7.0	13.8~16.8	-	5.7~7.0	17.2~21.0	-	
18	Hold Up Time (Typ)	(*8) -	20ms						
19	Leakage Current	(*9) -	Less than 0.3mA@50Hz,0.5mA@60Hz at 265VAC. 0.11mA(Typ) at 115VAC / 0.22mA(Typ) @60Hz at 230VAC. Convection : -20~70°C (-20~+55°C: 100%, 70°C: 70%)						
20	Operating Temperature	(*10) -	5~95 %RH (No dewdrop)						
21	Operating Humidity	-	-30~+85°C						
22	Storage Temperature	-	5%~95%RH (No dewdrop)						
23	Storage Humidity	-	Convection cooling						
24	Cooling	-	Designed to meet EN55011/EN55022-B, FCC-B, VCCI-B						
25	EMI	-	I/P-O/P: 3kVAC(10mA), I/P-FG: 2.0kVAC(10mA), O/P-FG: 500VAC(20mA), CH1-CH2/CH3: 500VAC(20mA) for 1min.						
26	Withstand Voltage	-	More than 100MΩ at Ta=25°C and 70%RH, Output - FG: 500VDC						
27	Isolation Resistance	-	10-55Hz Amplitude (sweep 1min) Less than 19.6m/s ² X, Y, Z 1Hr each						
28	Vibration	-	Less than 196.1m/s ²						
29	Shock (In package)	-	Approved by IEC60601-1 3rd Edition, IEC60950-1 2nd Edition Approved by EN60950-1, UL60950-1, CSA60950-1 (cTUVus) Approved by ANSI/AAMI ES60601-1, EN60601-1 3rd Edition						
30	Safety	-	Designed to meet IEC61000-4-2(Level 3,4), -3(Level 3), -4(Level 4), -5(Level 3,4), -6(Level 3), -8(Level 4), -11						
31	Immunity	-	90						
32	Weight (Typ)	g	50.8 x 26 x 101.6 (Refer to Outline Drawing)						
33	Size (W.H.D.)	mm							

NOTES:

- * 1 : At 100/200VAC, Ta=25°C and typical load.
- * 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 : Measure with JEITA RC-9131A probe, Bandwidth of scope :20MHz.
- * 5 : 85~265VAC, typical load.
- * 6 : No load-typical load, constant input voltage.
- * 7 : Current limit and Hiccup with automatic recovery. Not operate at over load or dead short condition for more than 30seconds.
- * 8 : At 200VAC, nominal output voltage and typical load.
- * 9 : Measured by the each measuring method of UL, CSA, EN and DENAN.
- *10: Ratings - Derating at standard mounting (Fig. B).
 - Load (%) is percent of maximum output power or typical load, whichever is greater.
 - As for other mountings, refer to derating curve (CA837-01-02).
 - When forced air cooling, refer to derating curve (CA837-01-02).
 - When ambient temperature less is than -10°C, refer to derating curve (CA837-01-03).
- *11: Please refer to Fig. A (pending) for measurement determination of line & load regulation and output ripple voltage.
- *12: No load-typical load.



OUTPUT DERATING

CA837-01-02

*COOLING: CONVECTION COOLING

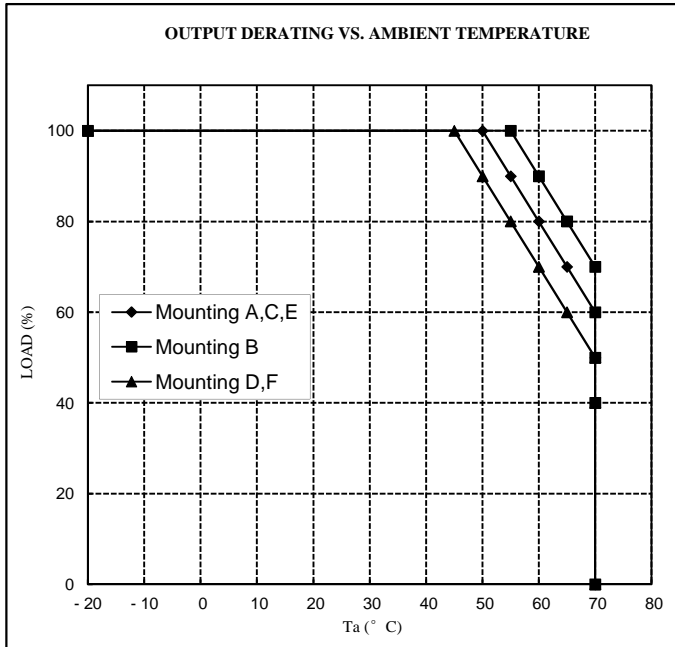
Ta (°C)	LOADING CONDITION(%)		
	Mounting A,C,E	Mounting B	Mounting D,F
-20	100	100	100
45	100	100	100
50	100	100	90
55	90	100	80
60	80	90	70
65	70	80	60
70	60	70	50

*COOLING: FORCED AIR COOLING

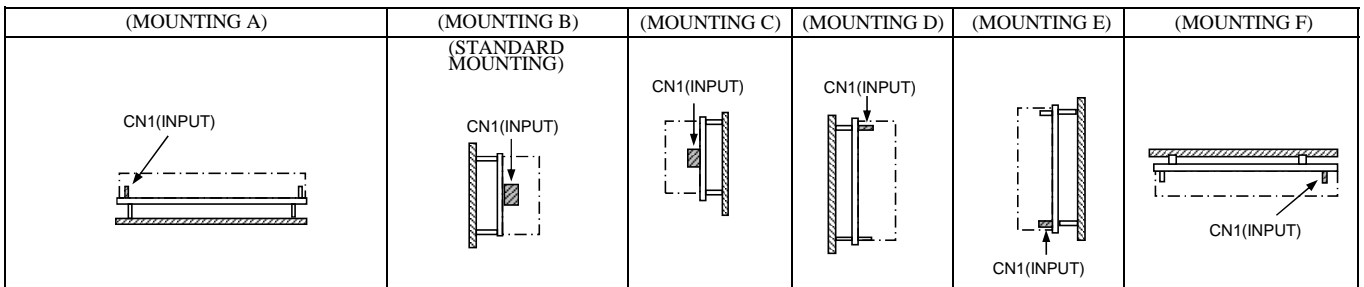
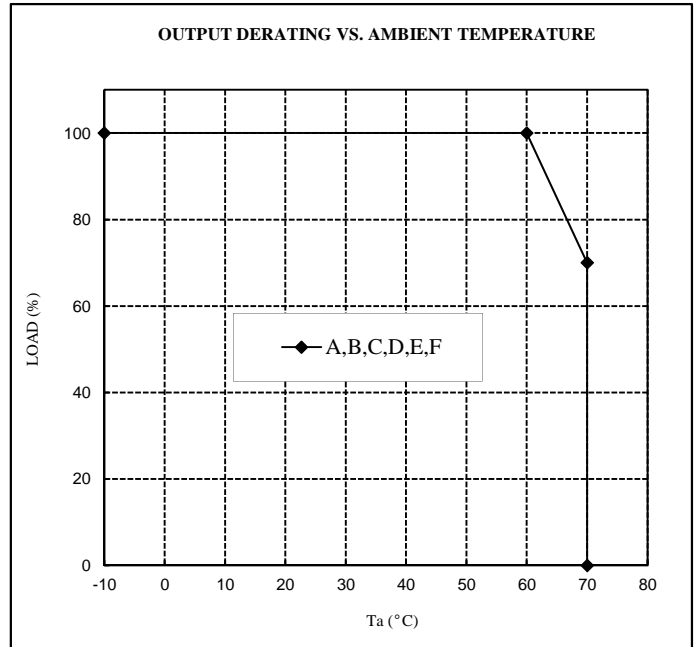
Ta (°C)	LOADING CONDITION(%)
	All Mounting (A,B,C,D,E,F)
-20~60	100
70	70

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

*COOLING: CONVECTION COOLING



*COOLING: FORCED AIR COOLING



OUTPUT DERATING

CA837-01-03

Output derating for start up when ambient temperature is less than -10°C

INPUT VOLTAGE	LOADING CONDITION(%)
	All Mounting (A,B,C,D,E,F)
85VAC/88VDC	60
105-265VAC/105-370VDC	100

