

Temperature increase of main components: 主要部品温度上昇

Model: CDS40048

1. Conditions

- (1) Input : DC 36 ~ 76 [V]
- (2) Output : Rated output
- (3) Aluminum base plate temp. : 85 [°C] (Fig1.1)

2. Result

The temperature Increase based on the aluminum base plate is shown below.

No.	Parts name	Symbol No.	Increase ( $\Delta T$ ) [deg]								Rated temp. [°C]	Reference
			02	03	05	07	12	15	24	28		
1	Input choke	L11	10	10	10	10	10	10	10	10	100	
2	Switching transistor	TR12	19	24	38	44	49	49	53	55	175	Junction temp.
3	Transformer	T11	20	24	29	20	35	32	46	48	155	
4	Transformer	T12	10	10	10	10	10	10	10	10	120	
5	Rectified diode(Output)	SS51	38	39	41	34	29	28	25	26	150	Junction temp.
6	Rectified diode(Output)	SS53	33	32	26	30	17	18	16	16	150	Junction temp.
7	Output choke	L51	34	30	37	38	48	48	48	46	155	
8	Power control IC	IC101	19	26	22	18	26	23	26	26	150	Junction temp.
9	Transformer	T101	15	15	15	15	15	15	15	15	120	
10	Switching transistor	TR101	13	13	13	13	13	13	13	13	150	Junction temp.
11	Photocoupler	PC102	7	7	7	7	7	7	7	7	125	Junction temp.
12	Voltage regulator	IC501	11	11	11	11	11	11	11	11	125	Junction temp.
13	Printed circuit board	P2	31	27	31	24	27	27	31	27	130	
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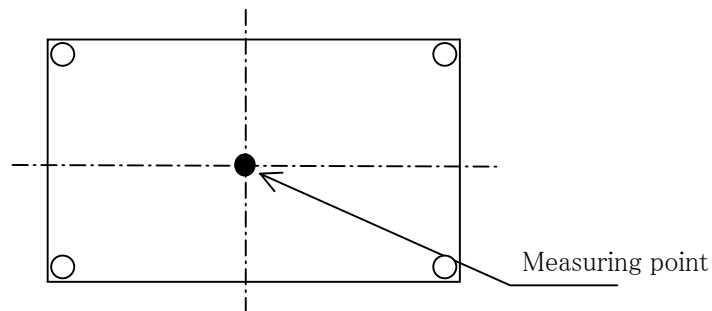


Fig.1.1 Measuring point of aluminum base plate temperature.