

Temperature increase of main components

Model: CBS20048

1. Conditions

(1) Input	:	DC 36 ~ 76 [V]	
(2) Output	:	Rated output	
(3) Aluminum base plate temp.	:	03,05	... 100 [°C]
		12,15,24,28,48	... 85 [°C]
(4) Ambient temp.	:		25 [°C]

(Fig1.1)

2. Result

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

No.	Parts name	Symbol No.	Increase (ΔT)							Rated temp. [°C]	Reference
			[deg]								
			03	05	12	15	24	28	48		
1	Input choke(coil)	L11	1	14	16	19	18	24	18	130	
2	Switching transistor	TR11	15	18	24	22	27	28	24	150	Junction temp.
3	Rectified diode(Output)	SS51	21	19	12	12	16	15	10	150	Junction temp.
4	Rectified diode(Output)	SS52	17	18	12	13	10	12	24	150	Junction temp.
5	Transformer(coil)	T11	0	7	11	11	37	48	24	155	
6	Output choke(coil)	L51	27	26	30	30	33	44	37	155	
7	Power control IC	IC101	9	7	11	11	11	13	5	150	Junction temp.
8	Transformer	T101	11	7	9	8	8	11	8	130	
9	Switching transistor	TR104	-2	-2	7	7	7	7	0	150	Junction temp.
10	Photocoupler	PC102	2	5	1	2	0	3	3	125	Junction temp.
11	IC	IC503	-4	-4	-7	-8	-7	-2	-2	125	Junction temp.
12	Transistor	TR501	12	11	4	4	5	5	12	150	Junction temp.
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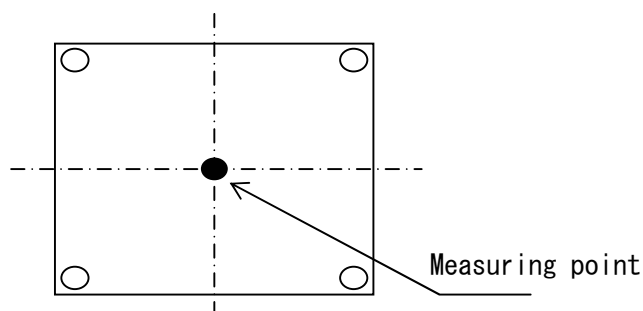


Fig.1.1 Measuring point of aluminum base plate temperature.