

Date : Nov.26,2009

Temperature increase of main components

Model: DHS250B

## 1. Conditions

- (1) Input : DC 200~400 [V]  
 (2) Output : Rated output  
 (3) Aluminum base plate temp. : 85 [°C] (Fig1.1)  
 (4) Ambient temp. : 25 [°C]

## 2. Result

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

No.	Parts name	Symbol No.	Increase ( $\Delta T$ )						Rated temp. [°C]	Reference
			[deg]							
			3.3	5	7.5	15	24	28		
1	Switching transistor	TR21	9	14	14	14	18	15	150	Junction temp.
2	Switching transistor	TR31	10	13	11	13	14	14	150	Junction temp.
3	Rectified MOS-FET(Output)	TR51	14	13	19	/	/	/	150	Junction temp.
4	Rectified MOS-FET(Output)	TR61	11	12	12	/	/	/	150	Junction temp.
5	Rectified diode(Output)	SS51	/	/	/	22	17	15	150	Junction temp.
6	Rectified diode(Output)	SS61	/	/	/	24	19	17	150	Junction temp.
7	Transformer(coil)	T11	18	27	32	37	40	39	155	
8	Output choke(coil)	L51	24	28	45	25	53	37	155	
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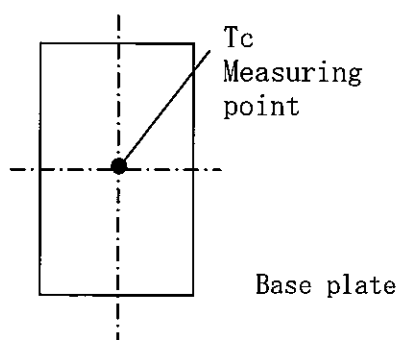


Fig.1.1 Measuring point of aluminum base plate temperature.

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Temperature increase of main components

Model: DHS250B

## 1. Conditions

- (1) Input : DC 200~400 [V]  
 (2) Output : Rated output  
 (3) Aluminum base plate temp. : 75 [°C] (Fig1.1)  
 (4) Ambient temp. : 25 [°C]

## 2. Result

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

No.	Parts name	Symbol No.	Increase ( $\Delta T$ )						Rated temp. [°C]	Reference
			[deg]							
			12	48						
1	Switching transistor	TR21	12	16					150	Junction temp.
2	Switching transistor	TR31	11	13					150	Junction temp.
3	Rectified diode(Output)	SS51	24	10					150	Junction temp.
4	Rectified diode(Output)	SS61	19	17					150	Junction temp.
5	Transformer(coil)	T11	40	43					155	
6	Output choke(coil)	L51	24	14					155	
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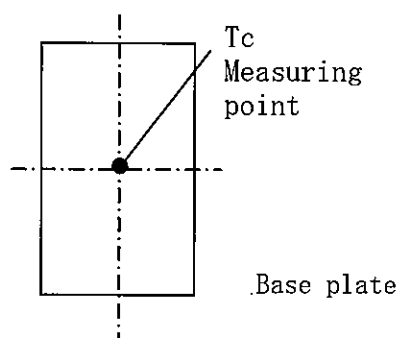


Fig.1.1 Measuring point of aluminum base plate temperature.