

Date : Jan.30,2017

Temperature increase of main components

Model: MGFW1R548□□

1. Conditions

- (1) Input :DC 48 [V]
- (2) Output :Rated output
- (3) Cooling method :Convection cooling
- (4) Mounting method :Shown as Fig.1.1

2. Result

Table 2.1 Temperature increase of main components

| Table 2.1 Temperature increase of main components | | | | | | |
|---|--------------------------|------------|-------------------------|-----------|------------------|--------------------|
| No. | Parts name | Symbol No. | Increase (ΔT) | | Rated temp. [°C] | Reference |
| | | | [deg] | | | |
| | | | $\pm 12V$ | $\pm 15V$ | | |
| 1 | Switching MOS-FET | TR11 | 14 | 15 | 150 | Junction Temp. |
| 2 | Switching MOS-FET | TR101 | 15 | 16 | 150 | Junction Temp. |
| 3 | Power control IC | IC12 | 16 | 16 | 150 | Junction Temp. |
| 4 | Rectified diode (Output) | D201 | 16 | 17 | 150 | Junction Temp. |
| 5 | Rectified diode (Output) | D202 | 16 | 18 | 150 | Junction Temp. |
| 6 | Photocoupler | PC11 | 15 | 15 | 125 | Junction Temp. |
| 7 | Transformer (PCB) | P2 | 16 | 17 | 130 | |
| 8 | CASE | CASE | 15 | 15 | 110 | Top Surface Center |
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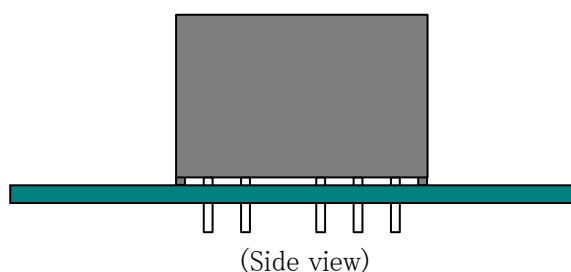


Fig.1.1 Mounting method
(Normal position)