

Temperature increase of main components

Model: MGW3048□□

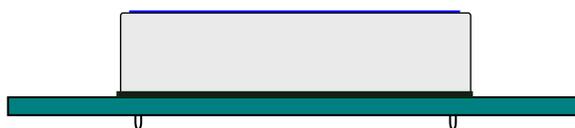
1. Conditions

- (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

| No. | Parts name              | Symbol No. | Increase ( $\Delta T$ ) |           |           | Rated temp. [°C] | Reference      |
|-----|-------------------------|------------|-------------------------|-----------|-----------|------------------|----------------|
|     |                         |            | [deg]                   |           |           |                  |                |
|     |                         |            | $\pm 5V$                | $\pm 12V$ | $\pm 15V$ |                  |                |
| 1   | Transformer             | T101       | 50                      | -         | 51        | 150              |                |
| 2   | Switching MOS-FET       | TR101      | 44                      | -         | 47        | 150              | Junction Temp. |
| 3   | Rectified Diode(Output) | D201       | 53                      | -         | 48        | 150              | Junction Temp. |
| 4   | Rectified Diode(Output) | D203       | 52                      | -         | 48        | 150              | Junction Temp. |
| 5   | Output Choke Coil       | L201       | 53                      | -         | 50        | 150              |                |
| 6   | Bipolar Transistor      | TR113      | 40                      | -         | 41        | 150              | Junction Temp. |
| 7   | Case                    | -          | 42                      | -         | 41        | -                |                |
| 8   |                         |            |                         |           |           |                  |                |
| 9   |                         |            |                         |           |           |                  |                |
| 10  |                         |            |                         |           |           |                  |                |
| 11  |                         |            |                         |           |           |                  |                |
| 12  |                         |            |                         |           |           |                  |                |
| 13  |                         |            |                         |           |           |                  |                |
| 14  |                         |            |                         |           |           |                  |                |
| 15  |                         |            |                         |           |           |                  |                |
| 16  |                         |            |                         |           |           |                  |                |
| 17  |                         |            |                         |           |           |                  |                |
| 18  |                         |            |                         |           |           |                  |                |
| 19  |                         |            |                         |           |           |                  |                |
| 20  |                         |            |                         |           |           |                  |                |



(Side view)

Fig.1.1 Mounting method  
(Normal position)