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Temperature increase of main components

Model: SUS/SUW612

## 1. Conditions

- (1) Input :DC 9 - 18 [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 ( $\Delta T$ ) |    |     |     |      |      | Rated temp. [°C] | Reference      |
|   |                         |            | [deg]                   |    |     |     |      |      |                  |                |
|   |                         |            | 3.3V                    | 5V | 12V | 15V | ±12V | ±15V |                  |                |
| 1   | Switching Transistor    | TR11       | 51                      | 49 | 46  | 44  | 44   | 44   | 150              | Junction Temp. |
| 2   | Rectified Diode(Output) | D71        | 69                      | 64 | 45  | 38  | 44   | 42   | 150              | Junction Temp. |
| 3   | Transformer             | T11        | 57                      | 68 | 63  | 55  | 52   | 50   | 155              |                |
| 4   | Photocoupler            | PC11       | 48                      | 49 | 44  | 40  | 41   | 39   | 125              | Junction Temp. |
| 5   | Output Capacitor        | C71        | 54                      | 50 | 37  | 30  | 36   | 36   | 125              |                |
| 6   | Transistor              | TR21       | 49                      | 49 | 46  | 41  | 42   | 44   | 150              | Junction Temp. |
| 7   |                         |            |                         |    |     |     |      |      |                  |                |
| 8   |                         |            |                         |    |     |     |      |      |                  |                |
| 9   |                         |            |                         |    |     |     |      |      |                  |                |
| 10  |                         |            |                         |    |     |     |      |      |                  |                |
| 11  |                         |            |                         |    |     |     |      |      |                  |                |
| 12  |                         |            |                         |    |     |     |      |      |                  |                |
| 13  |                         |            |                         |    |     |     |      |      |                  |                |
| 14  |                         |            |                         |    |     |     |      |      |                  |                |
| 15  |                         |            |                         |    |     |     |      |      |                  |                |
| 16  |                         |            |                         |    |     |     |      |      |                  |                |
| 17  |                         |            |                         |    |     |     |      |      |                  |                |
| 18  |                         |            |                         |    |     |     |      |      |                  |                |
| 19  |                         |            |                         |    |     |     |      |      |                  |                |
| 20  |                         |            |                         |    |     |     |      |      |                  |                |



(Side view)

Fig.1.1 Mounting method  
(Normal position)