

Temperature increase of main components

Model: SUCS/SUCW1R524

1. Conditions

- (1) Input :DC 18 - 36 [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 | | | | | | | |
| | | | 3.3V | 5V | 12V | 15V | ±12V | ±15V | | |
| 1 | Transformer | T11 | 28 | 37 | 25 | 26 | 36 | 25 | 155 | |
| 2 | Switching Transistor | TR11 | 23 | 30 | 20 | 25 | 30 | 23 | 150 | Junction temp. |
| 3 | Rectified Diode(Output) | D50 | – | – | – | – | 35 | 28 | 150 | Junction temp. |
| 4 | Rectified Diode(Output) | D51 | 35 | 36 | 35 | 34 | – | – | 150 | Junction temp. |
| 5 | Input Choke | L11 | 24 | 31 | 24 | 26 | 31 | 25 | 125 | |
| 6 | Output Choke | L50 | – | – | – | – | 25 | 19 | 125 | |
| 7 | Output Choke | L51 | 22 | 28 | 18 | 20 | – | – | 125 | |
| 8 | Photocoupler | PC11 | 27 | 35 | 27 | 28 | 33 | 27 | 125 | Junction temp. |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |



(Side view)

Fig.1.1 Mounting method
(Normal position)