

Date : Mar.25,2005

Temperature increase of main components

Model: SUS/SUW1048

1. Conditions

- (1) Input :DC 36 - 76 [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 | Switching Transistor | TR31 | 50 | 53 | 57 | 58 | 49 | 52 | 150 | Junction Temp. |
| 2 | Transformer | T11 | 63 | 62 | 56 | 59 | 49 | 54 | 155 | |
| 3 | Rectifying MOS-FET | TR51 | 51 | 49 | — | — | — | — | 150 | Junction Temp. |
| 4 | Rectifying Diode | D52 | 46 | 48 | 47 | 54 | 35 | 39 | 150 | Junction Temp. |
| 5 | Photocoupler | PC11 | 37 | 38 | 38 | 41 | 29 | 32 | 125 | Junction Temp. |
| 6 | Input Choke Coil | L11 | 38 | 39 | 38 | 39 | 34 | 35 | 130 | |
| 7 | Output Choke Coil | L51 | 45 | 43 | 30 | 32 | 25 | 28 | 120 | |
| 8 | Output Capacitor | C51 | 47 | 45 | 36 | 39 | 31 | 34 | 125 | |
| 9 | Power Control IC | IC11 | 48 | 49 | 48 | 50 | 43 | 46 | 150 | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |
| 18 | | | | | | | | | | |
| 19 | | | | | | | | | | |
| 20 | | | | | | | | | | |



(Side view)

Fig.1.1 Mounting method
(Normal position)