

Nov.8,2021

Temperature increase of main components

Model: MHFW648□□

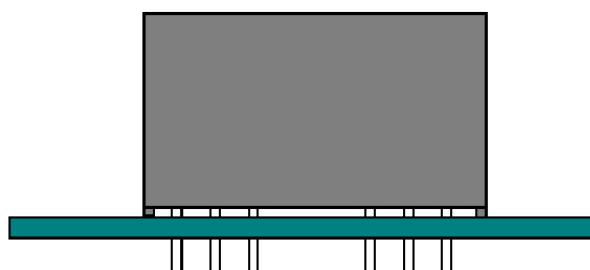
1. Conditions

- (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 (ΔT) | | | | | Rated temp. [°C] | Reference |
|-----|-------------------------|------------|-------------------------|-----------|---|---|---|------------------|--------------------|
| | | | [deg] | | | | | | |
| | | | $\pm 12V$ | $\pm 15V$ | - | - | - | | |
| 1 | Switching MOS-FET | TR101 | 46 | 45 | | | | 150 | Junction Temp. |
| 2 | Switching MOS-FET | TR111 | 48 | 48 | | | | 150 | Junction Temp. |
| 3 | Input Choke Coil | L101 | 44 | 44 | | | | 125 | |
| 4 | Output Choke Coil | L201 | 45 | 45 | | | | 125 | |
| 5 | Rectified diode(Output) | D201 | 53 | 45 | | | | 150 | Junction Temp. |
| 6 | Rectified diode(Output) | D202 | 53 | 49 | | | | 150 | Junction Temp. |
| 7 | Transformer | T11 | 49 | 49 | | | | 130 | |
| 8 | Photocoupler | PC11 | 42 | 41 | | | | 125 | Junction Temp. |
| 9 | Case | CASE | 43 | 42 | | | | 105 | Top Surface Center |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |



(Side view)

Fig.1.1 Mounting method
(Normal position)

日付：2021/11/8

主要部品温度上昇

機種名：MHFW648□□

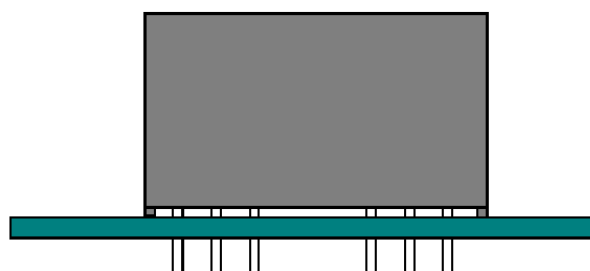
1. 測定条件

- (1) 入力 :DC 48 [V]
- (2) 出力 :定格出力
- (3) 冷却方法 :自然空冷
- (4) 取付方法 :図1.1に示す

2. 測定データ

表 2.1 主要部品温度上昇

| No. | 部品名 | 品番 | 上昇値 (ΔT) [deg] | | | | | 定格 温度 [°C] | 備考 |
|-----|-----------|-------|-------------------|------|---|---|---|------------------|-----------|
| | | | ±12V | ±15V | - | - | - | | |
| 1 | インバータFET | TR101 | 46 | 45 | | | | 150 | ジャンクション温度 |
| 2 | インバータFET | TR111 | 48 | 48 | | | | 150 | ジャンクション温度 |
| 3 | 入力チョークコイル | L101 | 44 | 44 | | | | 125 | |
| 4 | 出力チョークコイル | L201 | 45 | 45 | | | | 125 | |
| 5 | 出力整流DI | D201 | 53 | 45 | | | | 150 | ジャンクション温度 |
| 6 | 出力整流DI | D202 | 53 | 49 | | | | 150 | ジャンクション温度 |
| 7 | OTトランス | T11 | 49 | 49 | | | | 130 | |
| 8 | フォトカプラ | PC11 | 42 | 41 | | | | 125 | ジャンクション温度 |
| 9 | ケース | CASE | 43 | 42 | | | | 105 | 天面中心 |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | | | | | | | | | |
| 14 | | | | | | | | | |
| 15 | | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |



(横から見る)

図1.1 取り付け方法
(正規取付)