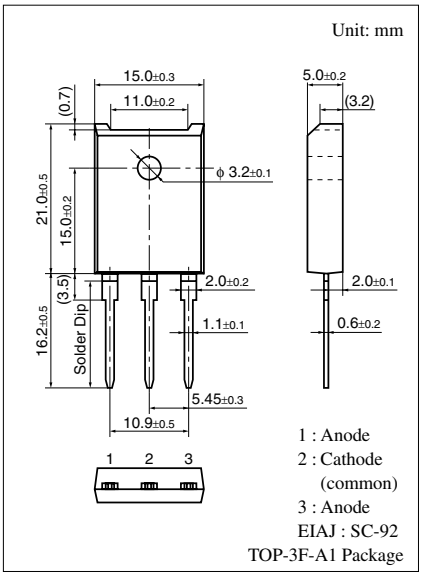
# MA3G751, MA3G751A (MA751, MA751A)

## Silicon epitaxial planar type (cathode common)

For switching mode power supply




### ■ Features

- $I_{F(AV)}$ = 20 A rectification is possible
- Cathode-common dual type
- Low forward voltage $V_F$
- TOP-3F-A1 package

### ■ Absolute Maximum Ratings $T_a$ = 25°C

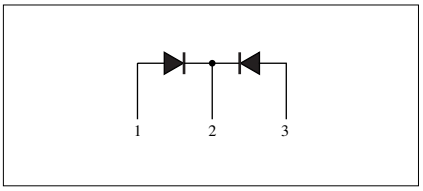
| Parameter | | Symbol | Rating | Unit |
|---|---|---|---|---|
| Repetitive peak reverse-voltage | MA3G751 | $V_{RRM}$ | 40 | V |
| | MA3G751A | | 45 | |
| Average forward current | | $I_{F(AV)}$ | 20 | A |
| Non-repetitive peak forward-surge-current * | | $I_{FSM}$ | 150 | A |
| Junction temperature | | $T_j$ | –40 to +125 | °C |
| Storage temperature | | $T_{stg}$ | –40 to +125 | °C |

Note) ∗: Half sine wave; 10 ms/cycle

Marking Symbol

- MA3G751 : MA751
- MA3G751A: MA751A

Internal Connection



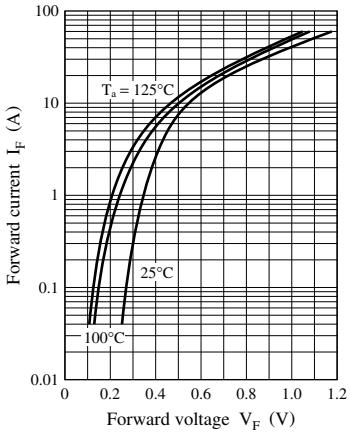

### ■ Electrical Characteristics $T_a$ = 25°C

| Parameter | | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|---|
| Reverse current (DC) | MA3G751 | $I_R$ | $V_R$ = 40 V | | | 5 | mA |
| | MA3G751A | | $V_R$ = 45 V | | | 5 | |
| Forward voltage (DC) | | $V_F$ | $I_F$ = 10 A | | | 0.55 | V |
| High voltage rectification | | $R_{th(j-c)}$ | Smoothed current (between junction and case) | | | 1.5 | °C/W |

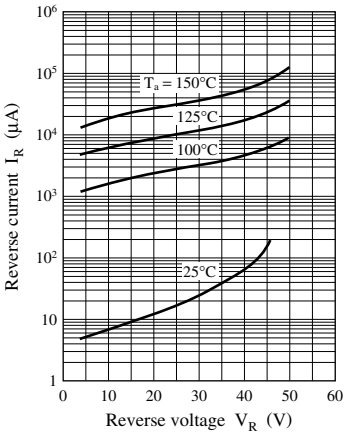
Note) Rated input/output frequency: 100 MHz

Note) The part number in the parenthesis shows conventional part number.

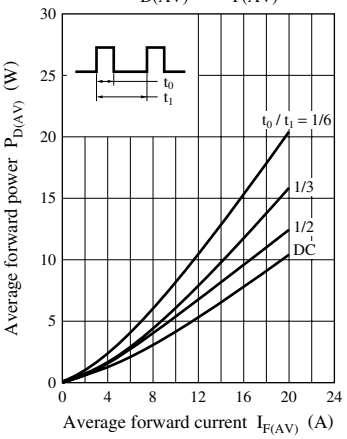
$I_F$ — $V_F$



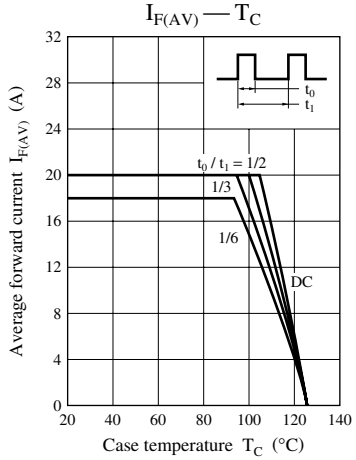

$I_R$ — $V_R$




$P_{D(AV)}$ — $I_{F(AV)}$




$I_{F(AV)}$ — $T_C$



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