

# MA3D756 (MA7D56)

Silicon epitaxial planar type (cathode common)

For switching mode power supply

## ■ Features

- Low forward voltage  $V_F$
- High dielectric breakdown voltage: > 5 kV
- Easy-to-mount, due to its V cut lead end

## ■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

| Parameter                                   | Symbol      | Rating      | Unit             |
|---|-------------|-------------|------------------|
| Repetitive peak reverse voltage             | $V_{RRM}$   | 60          | V                |
| Forward current (Average)                   | $I_{F(AV)}$ | 10          | A                |
| Non-repetitive peak forward surge current * | $I_{FSM}$   | 120         | A                |
| Junction temperature                        | $T_j$       | -40 to +125 | $^\circ\text{C}$ |
| Storage temperature                         | $T_{stg}$   | -40 to +125 | $^\circ\text{C}$ |

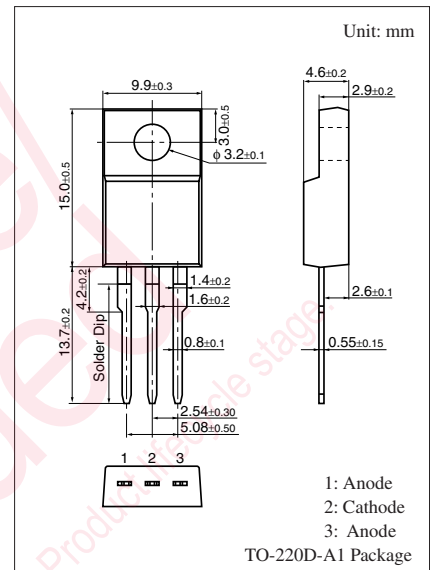
Note) \*: Half sine wave; 10 ms/cycle

## ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

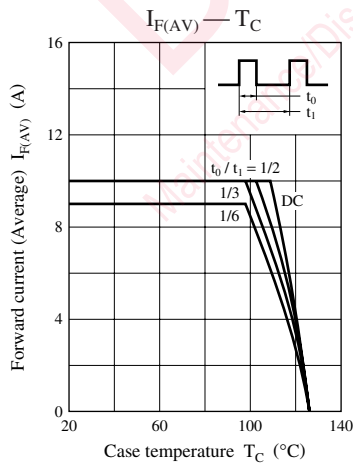
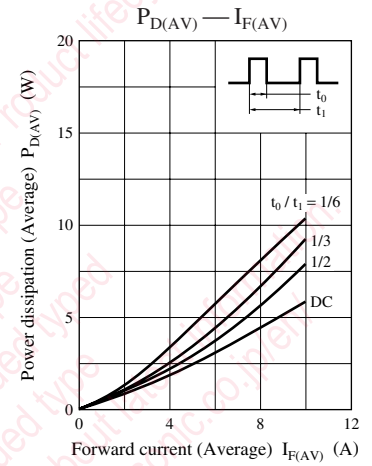
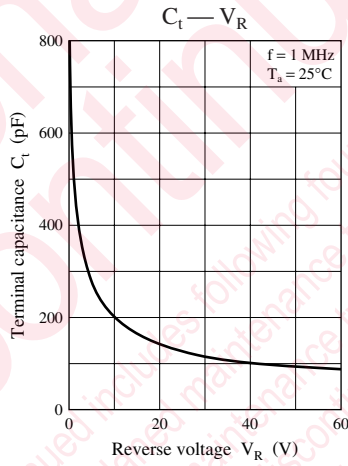
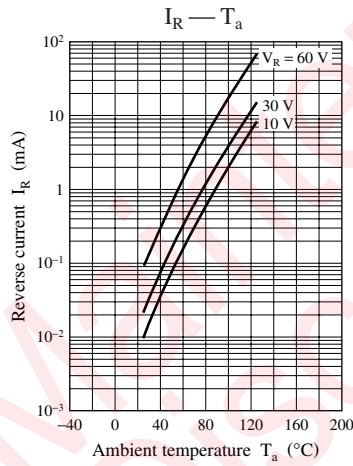
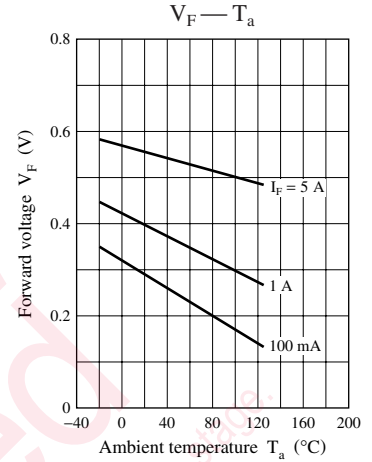
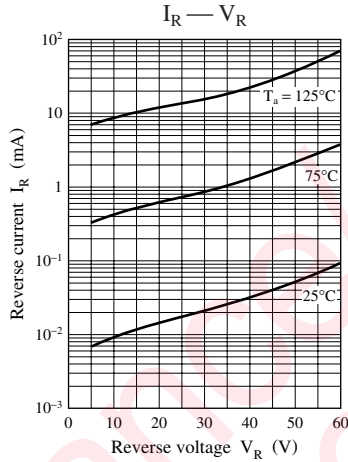
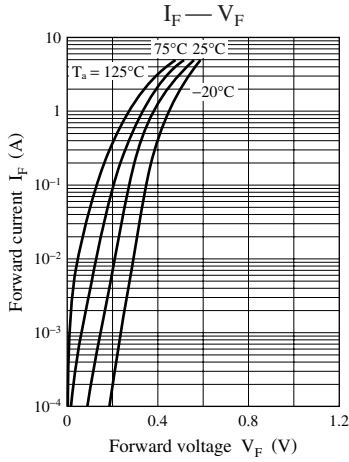
| Parameter                | Symbol        | Conditions           | Min | Typ | Max  | Unit               |
|--------------------------|---------------|----------------------|-----|-----|------|--------------------|
| Forward voltage          | $V_F$         | $I_F = 5 \text{ A}$  |     |     | 0.58 | V                  |
| Reverse current          | $I_R$         | $V_R = 60 \text{ V}$ |     |     | 3    | mA                 |
| Thermal resistance (j-c) | $R_{th(j-c)}$ |                      |     |     | 3.0  | $^\circ\text{C/W}$ |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 50 MHz.



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



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