# **MA3D756** (MA7D56)

## Silicon epitaxial planar type (cathode common)

For switching power supply

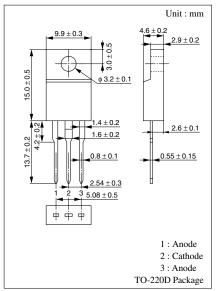
#### ■ Features

- Low forward rise voltage V<sub>F</sub>
- $\bullet$  TO-220D (Full-pack package) with high dielectric breakdown voltage > 5.0 kV
- Easy-to-mount, caused by its V cut lead end

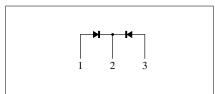
### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                                  | Symbol             | Rating      | Unit |
|--|--------------------|-------------|------|
| Repetitive peak reverse voltage            | $V_{RRM}$          | 60          | V    |
| Average forward current                    | I <sub>F(AV)</sub> | 10          | A    |
| Non-repetitive peak forward surge current* | $I_{FSM}$          | 120         | A    |
| surge current                              |                    |             |      |
| Junction temperature                       | $T_{j}$            | -40 to +125 | °C   |
| Storage temperature                        | $T_{stg}$          | -40 to +125 | °C   |

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



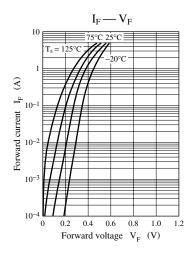
#### Internal Connection

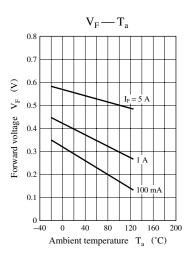


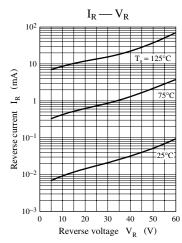
### ■ Electrical Characteristics $T_a = 25$ °C

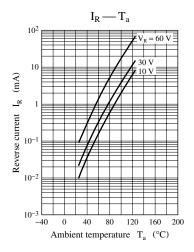
| Parameter            | Symbol               | Conditions                                 | Min | Тур | Max  | Unit |
|----------------------|----------------------|--|-----|-----|------|------|
| Reverse current (DC) | $I_R$                | $V_R = 60 \text{ V}$                       |     |     | 3    | mA   |
| Forward voltage (DC) | $V_{\rm F}$          | $I_F = 5 A$                                |     |     | 0.58 | V    |
| Thermal resistance   | R <sub>th(j-c)</sub> | Direct current (between junction and case) |     |     | 3    | °C/W |

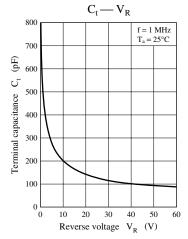
Note) Rated input/output frequency: 150 MHz

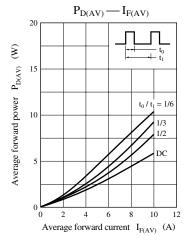


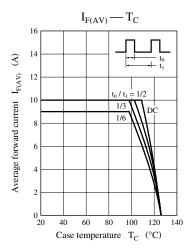












Panasonic 637

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