

# MA3D755

Silicon epitaxial planar type (cathode common)

For switching power supply

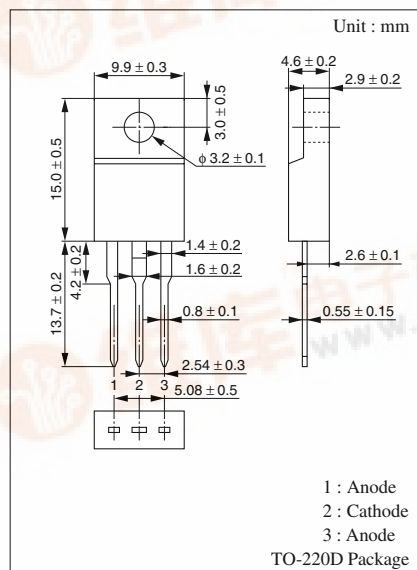
## ■ Features

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

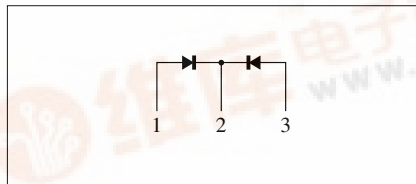
## ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                                  | Symbol      | Rating          | Unit             |
|--------------------------------------------|-------------|-----------------|------------------|
| Repetitive peak reverse voltage            | $V_{RRM}$   | 60              | V                |
| Average forward current                    | $I_{F(AV)}$ | 5               | A                |
| Non-repetitive peak forward surge current* | $I_{FSM}$   | 90              | 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



## Internal Connection



## ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter            | Symbol        | Conditions                                 | Min | Typ | Max  | Unit               |
|----------------------|---------------|--------------------------------------------|-----|-----|------|--------------------|
| Reverse current (DC) | $I_R$         | $V_R = 60$ V                               |     |     | 1    | mA                 |
| Forward voltage (DC) | $V_F$         | $I_F = 2.5$ A                              |     |     | 0.58 | V                  |
| Thermal resistance   | $R_{th(j-c)}$ | Direct current (between junction and case) |     |     | 3    | $^\circ\text{C/W}$ |

Note) Rated input/output frequency: 200 MHz

