

# MA2ZD14

Silicon epitaxial planar type

For high-speed switching circuits

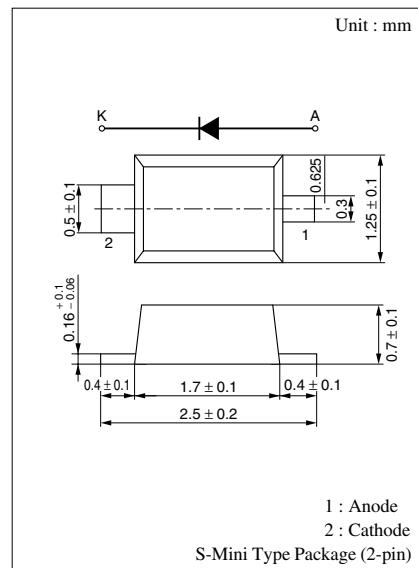
## ■ Features

- S-mini type 2-pin package
- Low forward rise voltage  $V_F$  ( $V_F < 0.4$  V)

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

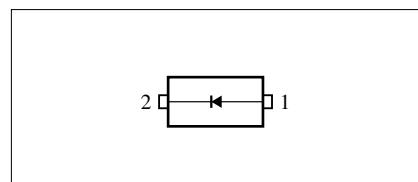
| Parameter                                  | Symbol      | Rating      | Unit             |
|--|-------------|-------------|------------------|
| Reverse voltage (DC)                       | $V_R$       | 20          | V                |
| Repetitive peak reverse voltage            | $V_{RRM}$   | 20          | V                |
| Average forward current                    | $I_{F(AV)}$ | 100         | mA               |
| Peak forward current                       | $I_{FM}$    | 300         | mA               |
| Non-repetitive peak forward surge current* | $I_{FSM}$   | 1           | A                |
| Junction temperature                       | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage temperature                        | $T_{stg}$   | -55 to +125 | $^\circ\text{C}$ |

Note) \* : The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)



Marking Symbol: 2N

Internal Connection



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

| Parameter              | Symbol   | Conditions   | Min | Typ | Max  | Unit          |
|------------------------|----------|--|-----|-----|------|---------------|
| Reverse current (DC)   | $I_R$    | $V_R = 10$ V   |     |     | 20   | $\mu\text{A}$ |
| Forward voltage (DC)   | $V_{F1}$ | $I_F = 5$ mA   |     |     | 0.27 | V             |
|                        | $V_{F2}$ | $I_F = 100$ mA   |     |     | 0.40 | V             |
| Terminal capacitance   | $C_t$    | $V_R = 0$ V, $f = 1$ MHz                                       |     | 25  |      | pF            |
| Reverse recovery time* | $t_{rr}$ | $I_F = I_R = 100$ mA<br>$I_{rr} = 10$ mA, $R_L = 100$ $\Omega$ |     | 3.0 |      | ns            |

Note) 1. Schottky barrier diode is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 250 MHz

3. \*:  $t_{rr}$  measuring instrument

