

# MA2Z7850G

## Silicon epitaxial planar type

For super high speed switching

For small current rectification

### ■ Features

- High-density mounting is possible
- Forward current (Average)  $I_{F(AV)} = 100$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time  $t_{rr}$
- Low forward voltage  $V_F$  and good rectification efficiency
- Reverse voltage  $V_R = 50$  V is guaranteed

### ■ Package

- Code  
SMini2-F3
- Pin Name  
1: Anode  
2: Cathode

### ■ Marking Symbol: 2E

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

| Parameter                                   | Symbol      | Rating      | Unit             |
|---|-------------|-------------|------------------|
| Reverse voltage                             | $V_R$       | 50          | V                |
| Repetitive peak reverse voltage             | $V_{RRM}$   | 50          | V                |
| Forward current (Average)                   | $I_{F(AV)}$ | 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)

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

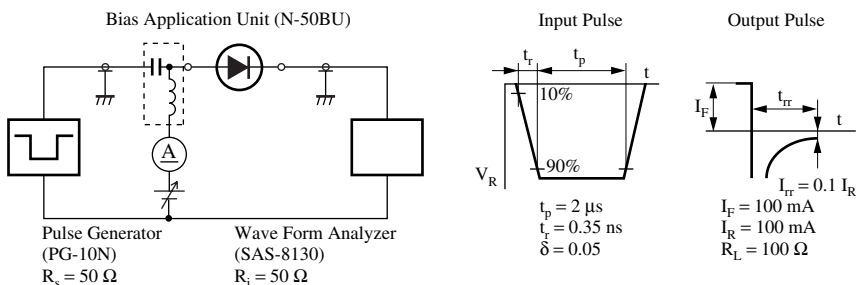
| Parameter               | Symbol   | Conditions  | Min | Typ | Max  | Unit          |
|-------------------------|----------|---|-----|-----|------|---------------|
| Forward voltage         | $V_F$    | $I_F = 100$ mA  |     |     | 0.55 | V             |
| Reverse current         | $I_R$    | $V_R = 50$ V  |     |     | 30   | $\mu\text{A}$ |
| 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>$I_{rr} = 0.1 I_R$ , $R_L = 100 \Omega$ |     | 3.0 |      | ns            |

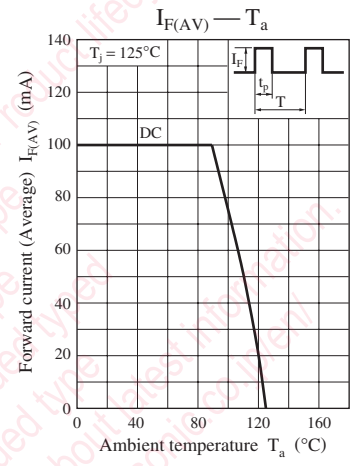
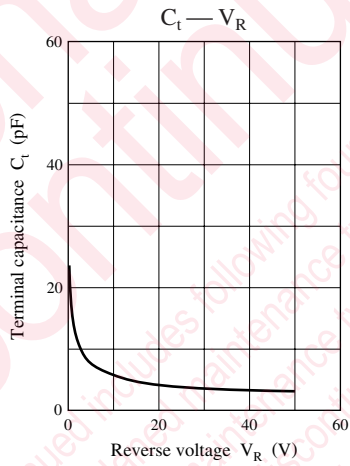
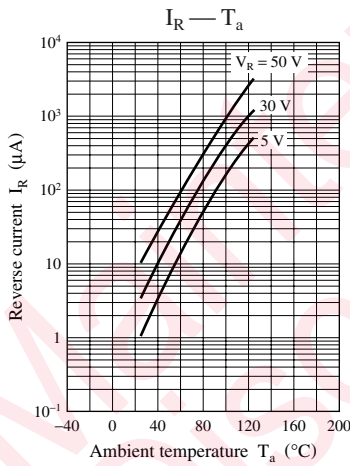
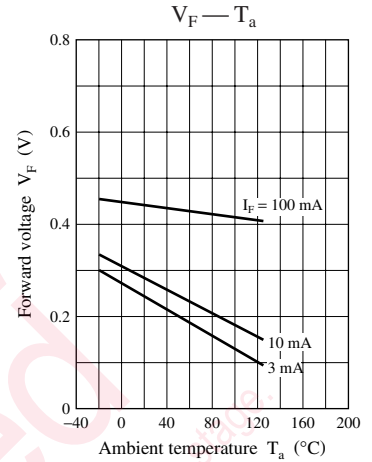
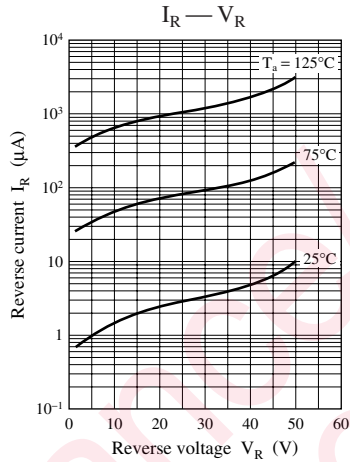
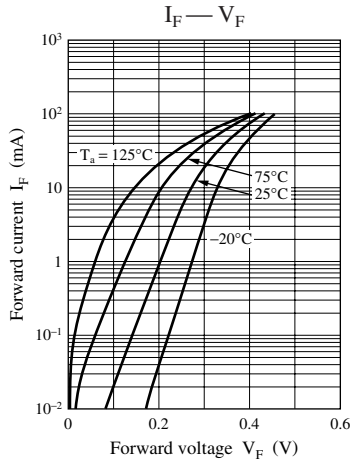
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. This product 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.

3. Absolute frequency of input and output is 200 MHz.

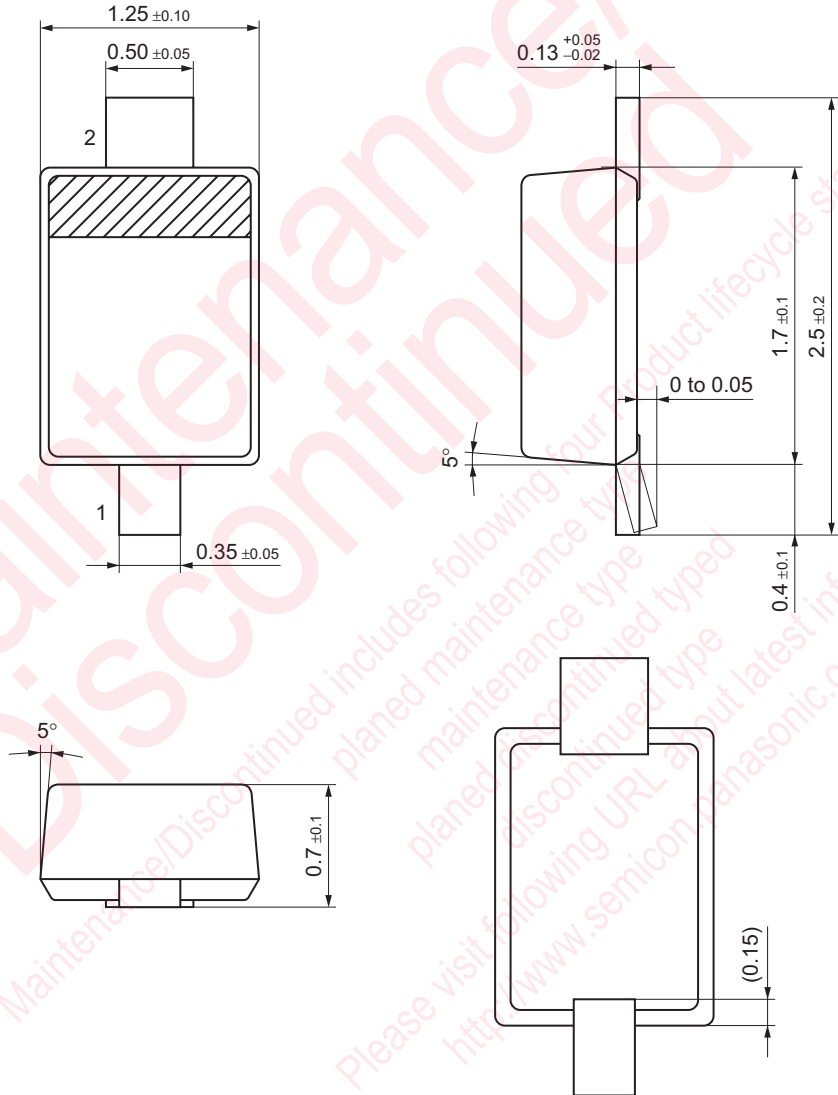
4. \*:  $t_{rr}$  measurement circuit





SMini2-F3

Unit: mm



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