

# MA3Z7930G

## Silicon epitaxial planar type

For super high speed switching

For small current rectification

### ■ Features

- Two MA3Z792 (MA792) is contained in one package (series connection)
- $I_{F(AV)} = 100$  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

### ■ Package

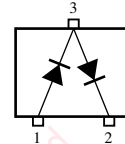
- Code  
SMini3-F2
- Pin Name  
1: Anode 1  
2: Cathode 2  
3: Cathode 1  
Anode 2

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

| Parameter                                   | Symbol    | Rating      | Unit             |    |
|---|-----------|-------------|------------------|----|
| Reverse voltage                             | $V_R$     | 30          | V                |    |
| Repetitive peak reverse voltage             | $V_{RRM}$ | 30          | V                |    |
| Forward current                             | Single    | $I_F$       | 100              | mA |
|   | Series    |             |                  |    |
| Peak forward current                        | Single    | $I_{FM}$    | 300              | mA |
|   | Series    |             | 200              |    |
| 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 | $^\circ\text{C}$ |    |

### ■ Marking Symbol: M4A

### ■ Internal Connection



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

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

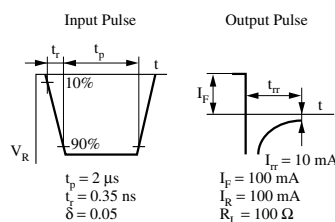
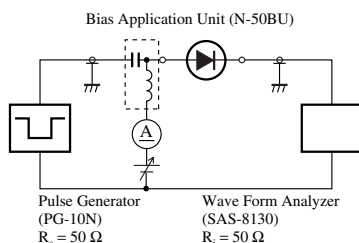
| Parameter               | Symbol   | Conditions   | Min | Typ | Max  | Unit          |
|-------------------------|----------|--|-----|-----|------|---------------|
| Forward voltage         | $V_F$    | $I_F = 100$ mA   |     |     | 0.55 | V             |
| Reverse current         | $I_R$    | $V_R = 30$ V   |     |     | 15   | $\mu\text{A}$ |
| Terminal capacitance    | $C_t$    | $V_R = 0$ V, $f = 1$ MHz                                     |     | 20  |      | pF            |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R = 100$ mA<br>$I_{rr} = 10$ mA, $R_L = 100 \Omega$ |     | 2.0 |      | ns            |

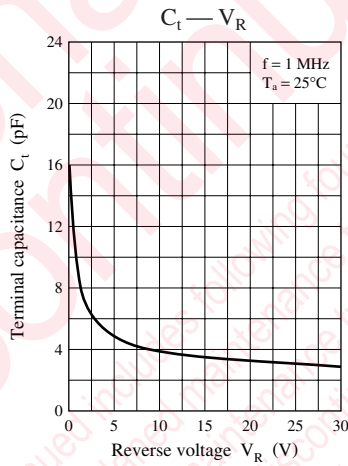
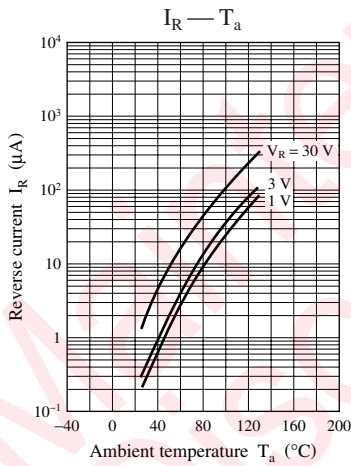
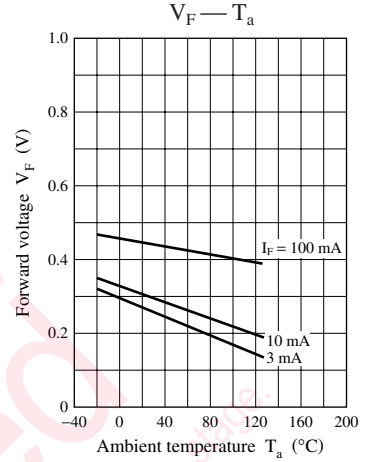
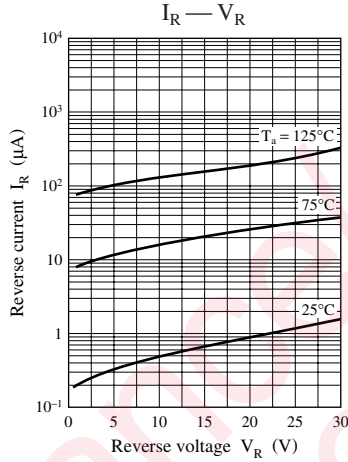
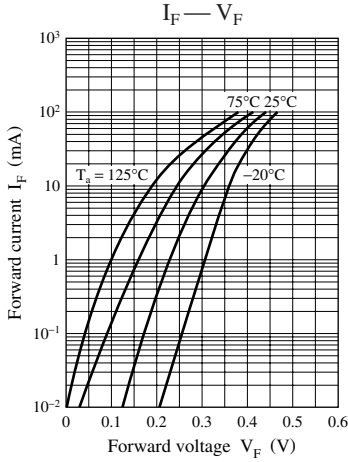
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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 250 MHz

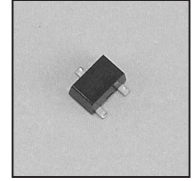
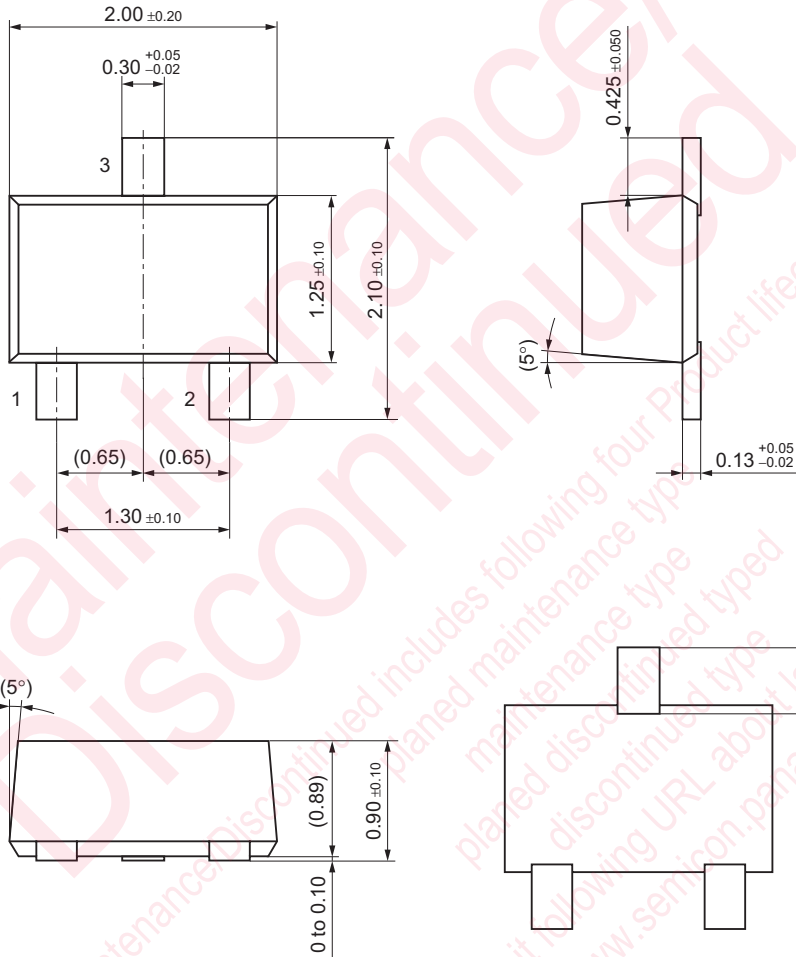
4. \*:  $t_{rr}$  measurement circuit





SMini3-F2

Unit: mm



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