

# MA2J1160G

## Silicon epitaxial planar type

For switching circuits

### ■ Features

- Allowing high-density mounting
- Soft recovery characteristic:  $t_{rr} = 100$  ns

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

| Parameter                                   | Symbol      | Rating      | Unit             |
|---|-------------|-------------|------------------|
| Reverse voltage                             | $V_R$       | 40          | V                |
| Maximum peak reverse voltage                | $V_{RM}$    | 40          | V                |
| Forward current (Average)                   | $I_{F(AV)}$ | 100         | mA               |
| Peak forward current                        | $I_{FM}$    | 225         | mA               |
| Non-repetitive peak forward surge current * | $I_{FSM}$   | 500         | mA               |
| Junction temperature                        | $T_j$       | 150         | $^\circ\text{C}$ |
| Storage temperature                         | $T_{stg}$   | -55 to +150 | $^\circ\text{C}$ |

Note) \*:  $t = 1$  s

### ■ Package

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

### ■ Marking Symbol: 1H

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

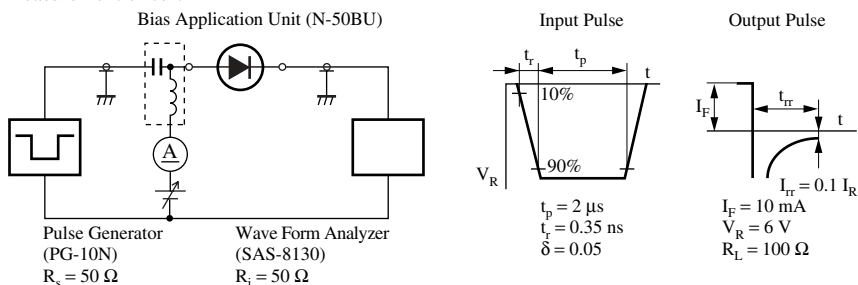
| Parameter                     | Symbol   | Conditions  | Min | Typ | Max | Unit          |
|-------------------------------|----------|---|-----|-----|-----|---------------|
| Forward voltage               | $V_F$    | $I_F = 100$ mA  |     |     | 1.2 | V             |
| Reverse voltage               | $V_R$    | $I_R = 100$ $\mu\text{A}$   | 35  |     |     | V             |
| Reverse current               | $I_{R1}$ | $V_R = 15$ V  |     |     | 5   | nA            |
|                               | $I_{R2}$ | $V_R = 40$ V  |     |     | 10  |               |
|                               | $I_{R3}$ | $V_R = 35$ V, $T_a = 100^\circ\text{C}$                                 |     |     | 100 | $\mu\text{A}$ |
| Terminal capacitance          | $C_t$    | $V_R = 6$ V, $f = 1$ MHz  |     | 1.0 | 2.0 | pF            |
| Forward dynamic resistance *1 | $r_f$    | $I_F = 3$ mA, $f = 30$ MHz  |     |     | 3.6 | $\Omega$      |
| Reverse recovery time *2      | $t_{rr}$ | $I_F = 10$ mA, $V_R = 6$ V<br>$I_{rr} = 0.1 I_R$ , $R_L = 100$ $\Omega$ |     |     | 100 | ns            |

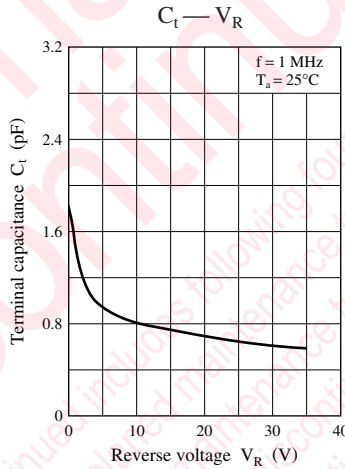
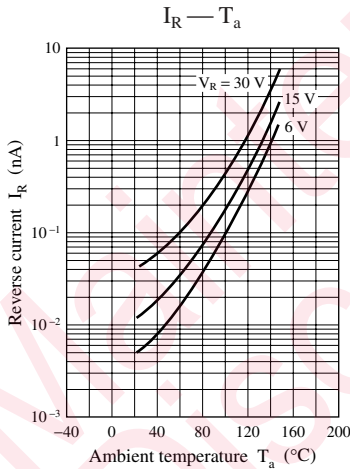
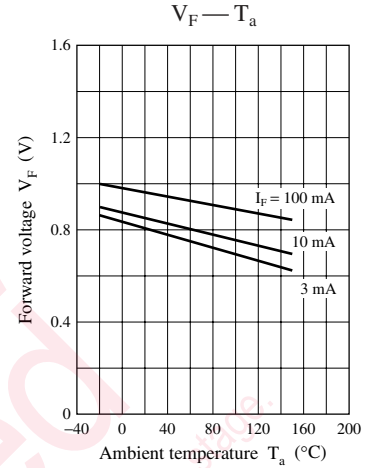
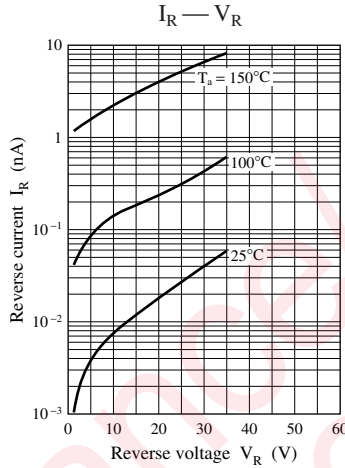
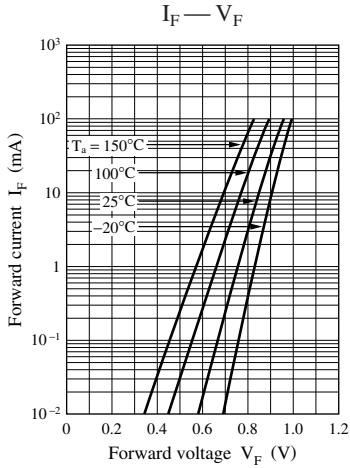
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 10 MHz.

3. \*1: YHP 4191A RF IMPEDANCE ANALYZER

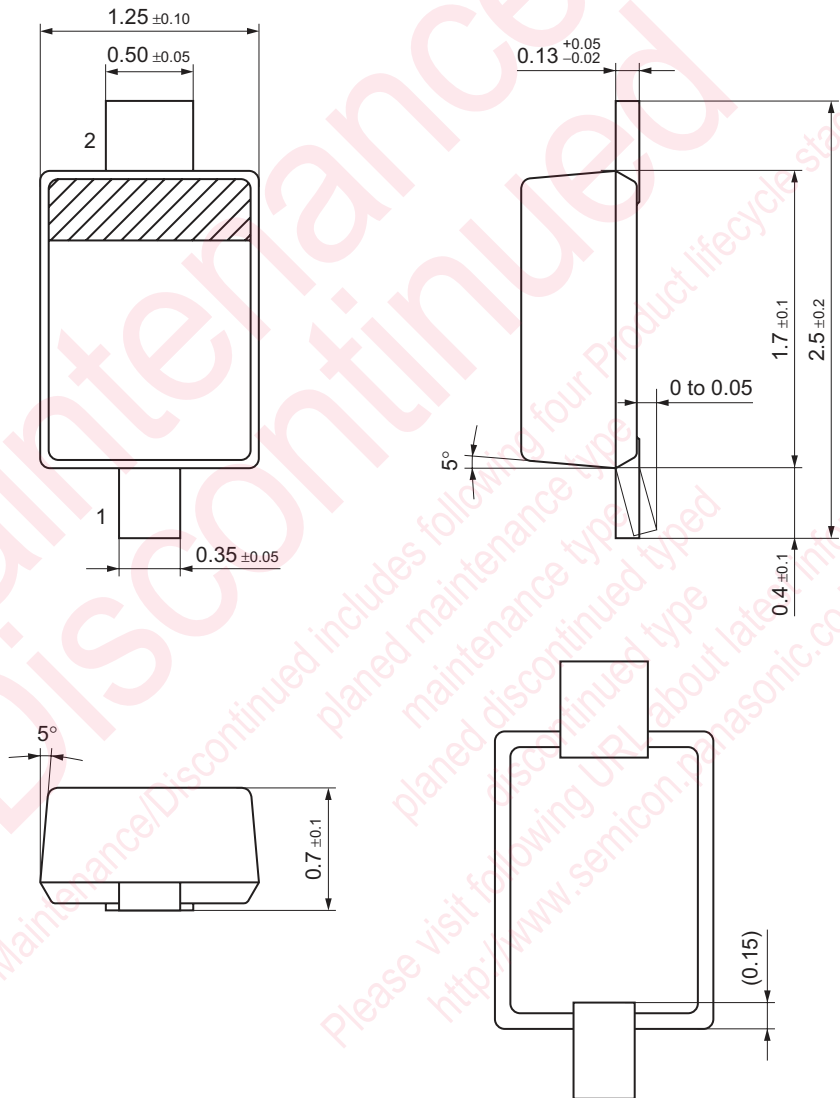
\*2:  $t_{rr}$  measurement circuit





SMini2-F3

Unit: mm



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