

# MA2J112

## Silicon epitaxial planar type

For switching circuits

### ■ Features

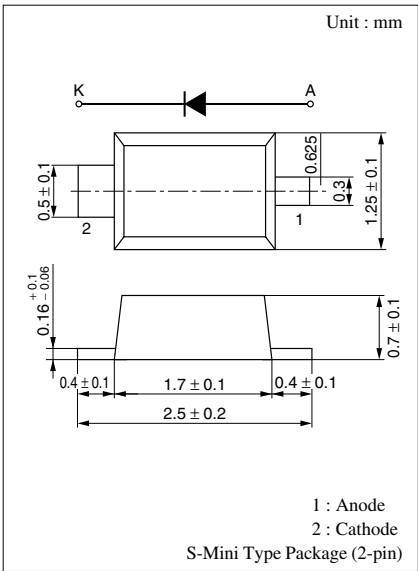
- Small S-mini type package, allowing high-density mounting
- Ensuring the average forward current capacity  $I_{F(AV)} = 200$  mA

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

| Parameter                                   | Symbol      | Rating      | Unit             |
|---------------------------------------------|-------------|-------------|------------------|
| Reverse voltage (DC)                        | $V_R$       | 40          | V                |
| Peak reverse voltage                        | $V_{RM}$    | 40          | V                |
| Average forward current*1                   | $I_{F(AV)}$ | 200         | mA               |
| Peak forward current                        | $I_{FM}$    | 600         | mA               |
| Non-repetitive peak forward surge current*2 | $I_{FSM}$   | 1           | A                |
| Junction temperature                        | $T_j$       | 150         | $^\circ\text{C}$ |
| Storage temperature                         | $T_{stg}$   | -55 to +150 | $^\circ\text{C}$ |

Note) \*1 : With a printed-circuit board

\*2 :  $t = 1$  s



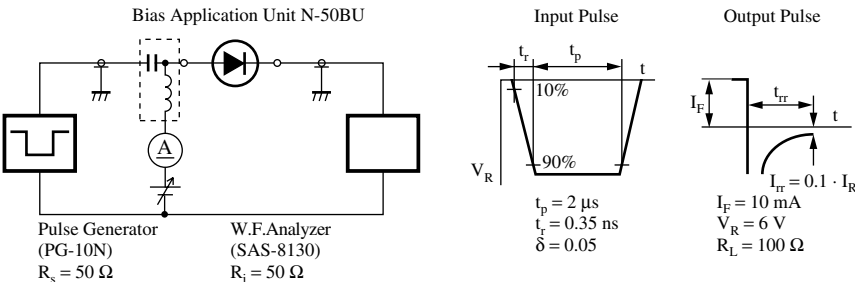
Marking Symbol: 1C

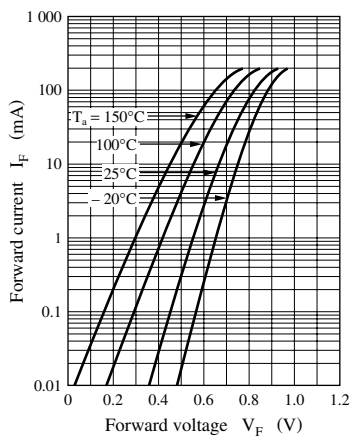
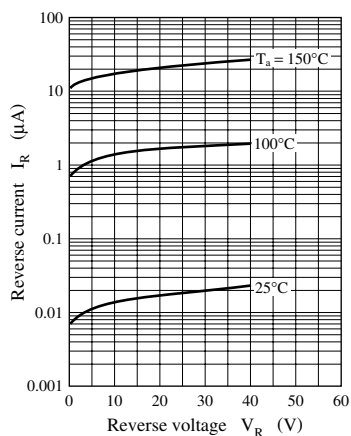
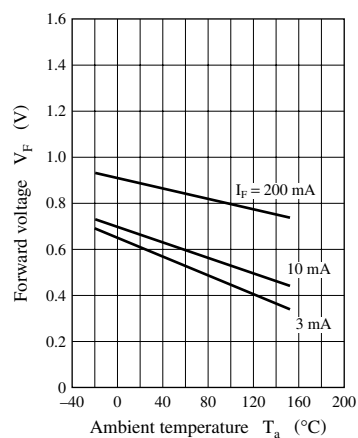
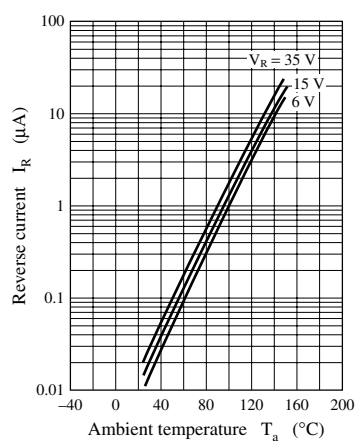
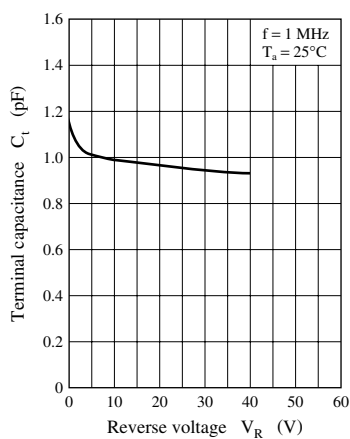
### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter              | Symbol   | Conditions                                                                  | Min | Typ | Max | Unit          |
|------------------------|----------|-----------------------------------------------------------------------------|-----|-----|-----|---------------|
| Reverse current (DC)   | $I_{R1}$ | $V_R = 15$ V                                                                |     |     | 50  | nA            |
|                        | $I_{R2}$ | $V_R = 35$ V                                                                |     |     | 500 | nA            |
|                        | $I_{R3}$ | $V_R = 35$ V, $T_a = 100^\circ\text{C}$                                     |     |     | 100 | $\mu\text{A}$ |
| Forward voltage (DC)   | $V_F$    | $I_F = 200$ mA                                                              |     |     | 1.1 | V             |
| Terminal capacitance   | $C_t$    | $V_R = 0$ V, $f = 1$ MHz                                                    |     |     | 4   | pF            |
| Reverse recovery time* | $t_{rr}$ | $I_F = 10$ mA, $V_R = 6$ V<br>$I_{rr} = 0.1 \cdot I_R$ , $R_L = 100 \Omega$ |     |     | 10  | ns            |

Note) 1. Rated input/output frequency: 100 MHz

2. \* :  $t_{rr}$  measuring circuit



$I_F - V_F$  $I_R - V_R$  $V_F - T_a$  $I_R - T_a$  $C_t - V_R$  $I_{F(\text{surge})} - t_W$ 