

# MA4SD10

Silicon epitaxial planar type

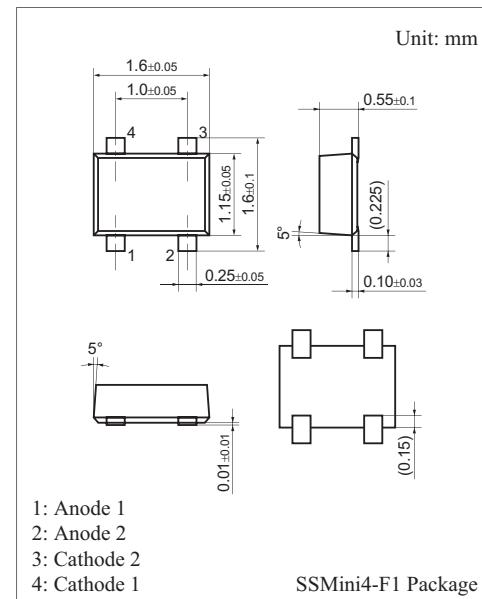
For super-high-speed switching circuits

## ■ Features

- Two isolated elements are contained in one package, allowing high-density mounting
- Low forward voltage  $V_F$

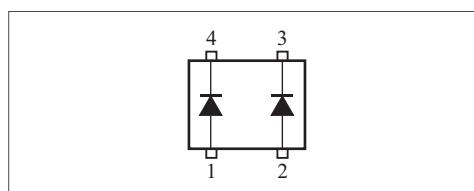
## ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                       | Symbol      | Rating      | Unit             |
|---------------------------------|-------------|-------------|------------------|
| Reverse voltage                 | $V_R$       | 20          | V                |
| Repetitive peak reverse voltage | $V_{RRM}$   | 20          | V                |
| Forward current (Average)       | $I_{F(AV)}$ | 200         | mA               |
| Double                          | 150         |             |                  |
| Peak forward current            | $I_{FM}$    | 300         | mA               |
| Double                          | 225         |             |                  |
| Junction temperature            | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage temperature             | $T_{stg}$   | -55 to +125 | $^\circ\text{C}$ |



Marking Symbol: M2A

## Internal Connection

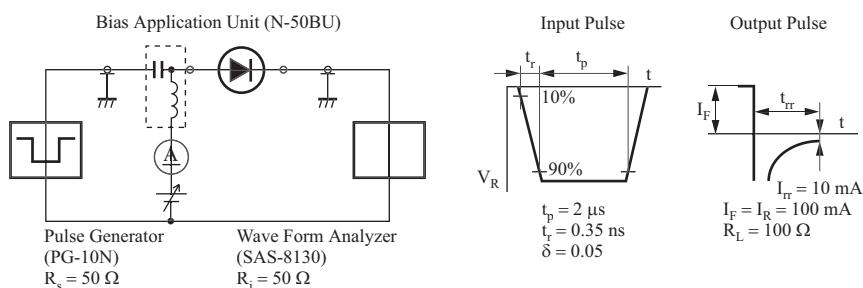


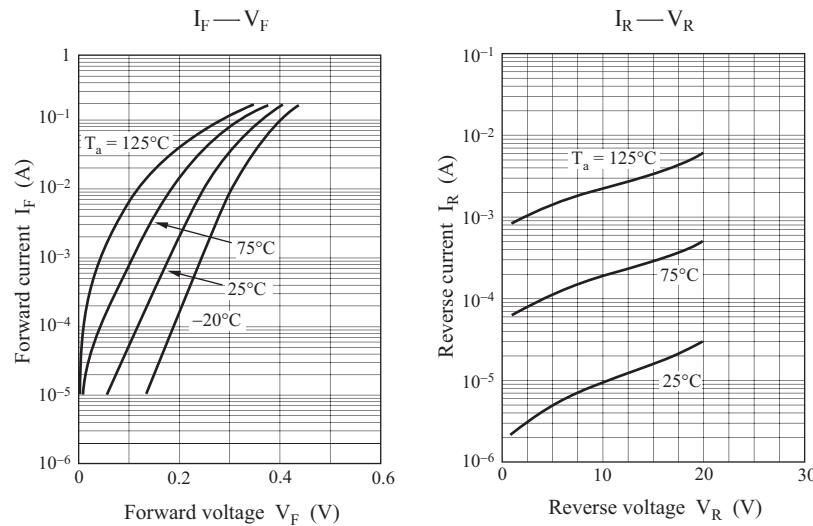
## ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter               | Symbol   | Conditions   | Min | Typ | Max  | Unit          |
|-------------------------|----------|--|-----|-----|------|---------------|
| Forward voltage         | $V_{F1}$ | $I_F = 5 \text{ mA}$   |     |     | 0.27 | V             |
|                         | $V_{F2}$ | $I_F = 100 \text{ mA}$   |     |     | 0.40 |               |
|                         | $V_{F3}$ | $I_F = 200 \text{ mA}$   |     |     | 0.47 |               |
| Reverse current         | $I_R$    | $V_R = 10 \text{ V}$   |     |     | 20   | $\mu\text{A}$ |
| Terminal capacitance    | $C_t$    | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$                                     |     | 25  |      | pF            |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R = 100 \text{ mA}, I_{rr} = 10 \text{ mA}$<br>$R_L = 100 \Omega$ |     | 3   |      | 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 250 MHz
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. \*:  $t_{rr}$  measurement circuit





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