# **MA27111**

## Silicon epitaxial planar type

For high-speed switching circuits

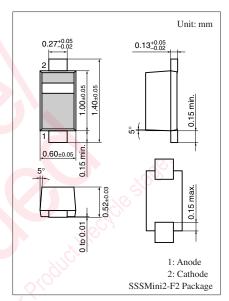
#### ■ Features

- High-density mounting is possible
- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance C<sub>t</sub>

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                                   | Symbol          | Rating      | Unit |
|---|-----------------|-------------|------|
| Reverse voltage                             | $V_R$           | 80          | V    |
| Maximum peak reverse voltage                | V <sub>RM</sub> | 80          | V    |
| Forward current                             | $I_{F}$         | 100         | mA   |
| Peak forward current                        | $I_{FM}$        | 225         | mA   |
| Non-repetitive peak forward surge current * | $I_{FSM}$       | 500         | mA   |
| Junction temperature                        | T <sub>j</sub>  | 150         | °C   |
| Storage temperature                         | $T_{stg}$       | -55 to +150 | °C   |

Note) \*: t = 1 s



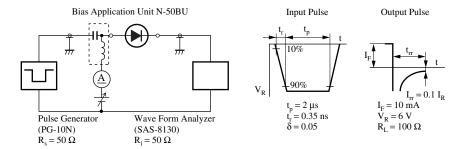
Marking Symbol: S

### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

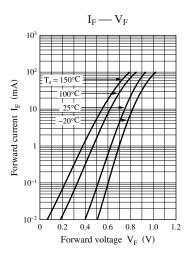
| Parameter               | Symbol          | Conditions                               | Min | Тур  | Max  | Unit |
|-------------------------|-----------------|--|-----|------|------|------|
| Forward voltage         | $V_{\rm F}$     | $I_F = 100 \text{ mA}$                   |     | 0.95 | 1.20 | V    |
| Reverse voltage         | $V_R$           | $I_R = 100 \mu A$                        | 80  |      |      |      |
| Reverse current         | $I_R$           | $V_R = 75 \text{ V}$                     |     |      | 100  | nA   |
| Terminal capacitance    | C <sub>t</sub>  | $V_R = 0 V, f = 1 MHz$                   |     | 0.6  | 2.0  | pF   |
| Reverse recovery time * | t <sub>rr</sub> | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ |     |      | 3    | ns   |
|                         |                 | $I_{rr} = 0.1 I_R , R_L = 100 \Omega$    |     |      |      |      |

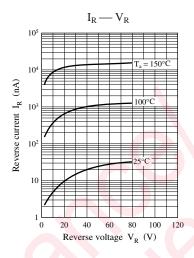
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

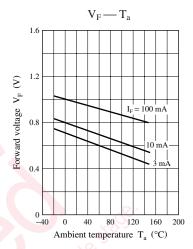
- 2. Absolute frequency of input and output is 10 MHz.
- 3. \*: t<sub>rr</sub> measurement circuit

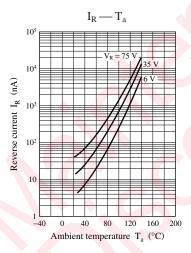


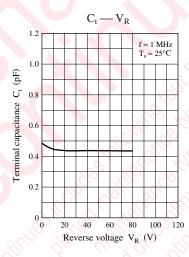
## **Panasonic**

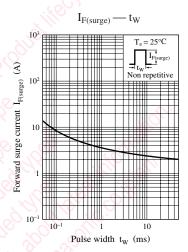












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