# **MA4X160A** (MA160A)

## Silicon epitaxial planar type

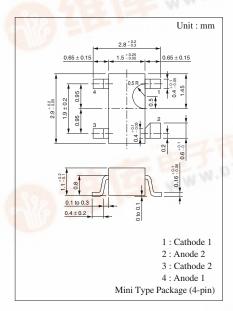
### For switching circuits

#### ■ Features

- Two isolated elements contained in one package, allowing highdensity mounting
- Centrosymmetrical wiring, allowing to free from the taping direction
- Short reverse recovery time t<sub>rr</sub>
- Small terminal capacitance, Ct

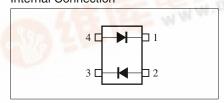
## ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter                                  |        | Symbol           | Rating      | Unit    |  |
|--|--------|------------------|-------------|---------|--|
| Reverse voltage (DC)                       |        | $V_R$            | 80          | V       |  |
| Repetitive peak reverse voltage            |        | V <sub>RRM</sub> | 80          | V       |  |
| Reverse voltage                            | Single | $I_{F(AV)}$      | 100         | mA      |  |
| (DC)                                       | Double | $I_{F(AV)}$      | 75          | mA/Unit |  |
| Repetitive peak forward current            | Single | $I_{FRM}$        | 225         | mA      |  |
|  | Double | $I_{FRM}$        | 170         | mA/Unit |  |
| Non-repetitive peak forward surge current* | Single | $I_{FSM}$        | 500         | mA      |  |
|  | Double | $I_{FSM}$        | 375         | mA/Unit |  |
| Junction temperature                       |        | T <sub>j</sub>   | 150         | °C      |  |
| Storage temperature                        |        | $T_{stg}$        | -55 to +150 | °C      |  |
| Note) * : t = 1 s                          | et G   | <b>三</b> 段       | WW.DZS      | C.Com   |  |



Marking Symbol: M1E

### Internal Connection

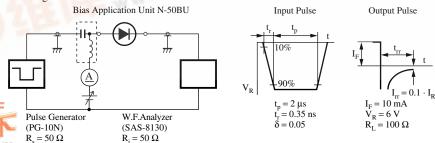


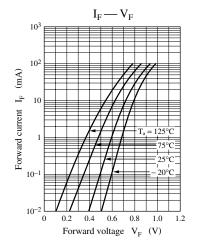
## ■ Electrical Characteristics T<sub>a</sub> = 25°C

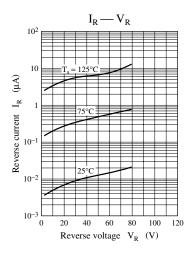
| Parameter              | Symbol          | Conditions   | Min | Тур  | Max | Unit |
|------------------------|-----------------|--|-----|------|-----|------|
| Reverse current (DC)   | $I_R$           | $V_R = 75 \text{ V}$   |     |      | 0.1 | μΑ   |
| Forward voltage (DC)   | V <sub>F</sub>  | $I_F = 100 \text{ mA}$   |     | 0.95 | 1.2 | V    |
| Reverse voltage (DC)   | V <sub>R</sub>  | $I_R = 100 \mu A$  | 80  | 160  |     | V    |
| Terminal capacitance   | C <sub>t</sub>  | $V_R = 0 \text{ V, f} = 1 \text{ MHz}$   |     | 0.9  | 2   | pF   |
| Reverse recovery time* | t <sub>rr</sub> | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}$<br>$I_{rr} = 0.1 \cdot I_R, R_L = 100 \Omega$ |     |      | 3   | ns   |

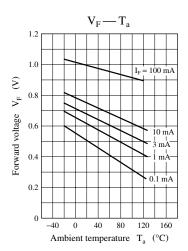
Note) 1. Rated input/output frequency: 100 MHz

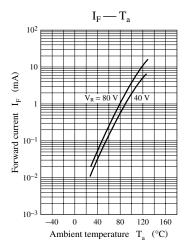
2. \*: t<sub>rr</sub> measuring circuit

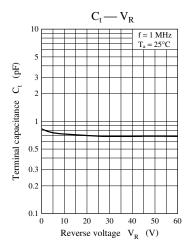


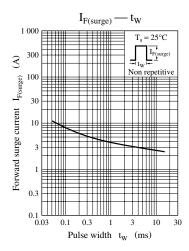












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