# **MA6X078** (MA78)

# Silicon epitaxial planar type

### For band switching

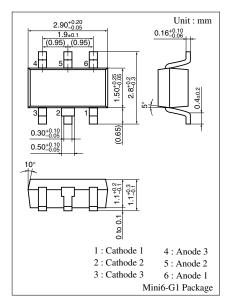
#### ■ Features

- Non connected three elements incorporated in one package
- Low forward dynamic resistance r<sub>f</sub>
- Less voltage dependence of diode capacitance C<sub>D</sub>
- Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

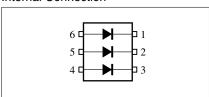
| Parameter                      | Symbol    | Rating      | Unit |
|--------------------------------|-----------|-------------|------|
| Reverse voltage (DC)           | $V_R$     | 35          | V    |
| Forward current (DC)           | $I_F$     | 100         | mA   |
| Operating ambient temperature* | $T_{opr}$ | -25 to +85  | °C   |
| Storage temperature            | $T_{stg}$ | -55 to +150 | °C   |

Note) \*: Maximum ambient temperature during operation



Marking Symbol: M2L

#### Internal Connection



## ■ Electrical Characteristics $T_a = 25$ °C

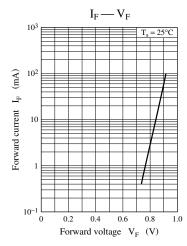
| Parameter                   | Symbol           | Conditions                                | Min | Тур  | Max  | Unit |
|-----------------------------|------------------|---|-----|------|------|------|
| Reverse current (DC)        | $I_R$            | $V_R = 33 \text{ V}$                      |     | 0.01 | 100  | nA   |
| Forward voltage (DC)        | $V_{\mathrm{F}}$ | $I_F = 100 \text{ mA}$                    |     | 0.92 | 1    | V    |
| Diode capacitance           | $C_D$            | $V_R = 6 \text{ V}, f = 1 \text{ MHz}$    |     | 0.9  | 1.2  | pF   |
| Forward dynamic resistance* | $r_{\mathrm{f}}$ | $I_F = 2 \text{ mA}, f = 100 \text{ MHz}$ |     | 0.65 | 0.85 | Ω    |

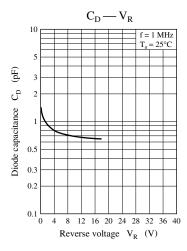
Note) 1. Each characteristic is a standard for individual diodes

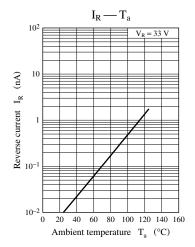
- 2. Rated input/output frequency: 100 MHz
- 3. \*: r<sub>f</sub> measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

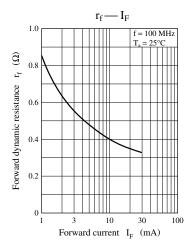
Note) The part number in the parenthesis shows conventional part number.

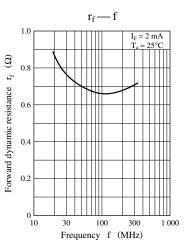
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