

# MA6X078 (MA78)

## Silicon epitaxial planar type

For band switching

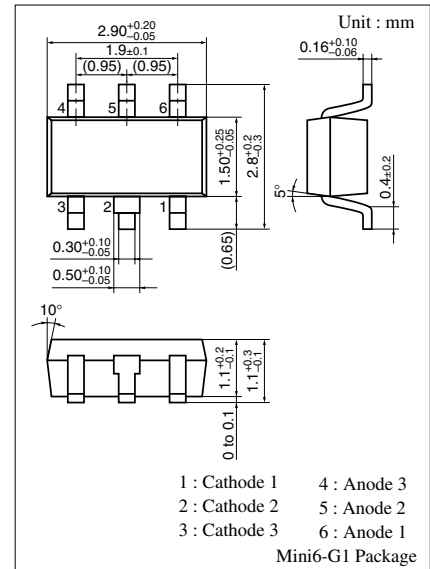
### ■ Features

- Non connected three elements incorporated in one package
- Low forward dynamic resistance  $r_f$
- Less voltage dependence of diode capacitance  $C_D$
- Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

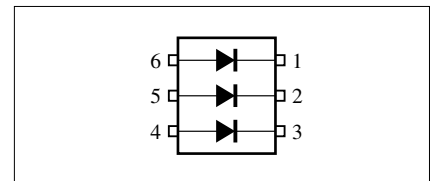
| Parameter                      | Symbol    | Rating      | Unit             |
|--------------------------------|-----------|-------------|------------------|
| Reverse voltage (DC)           | $V_R$     | 35          | V                |
| Forward current (DC)           | $I_F$     | 100         |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

Note) \* : Maximum ambient temperature during operation



Marking Symbol: M2L

Internal Connection



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

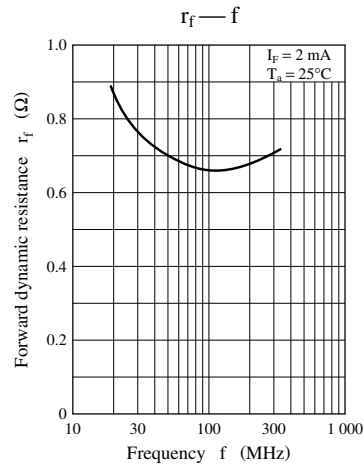
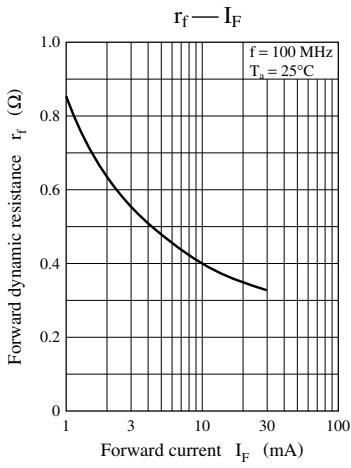
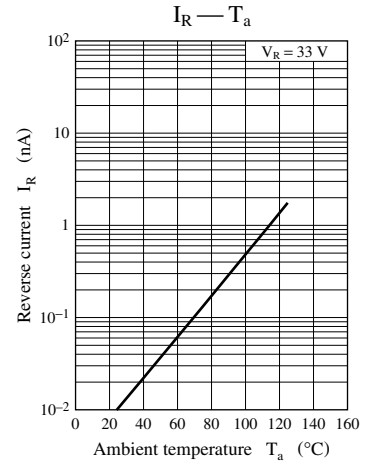
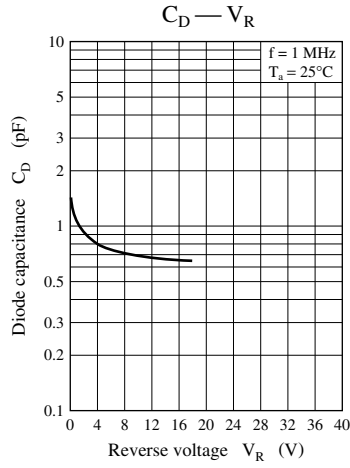
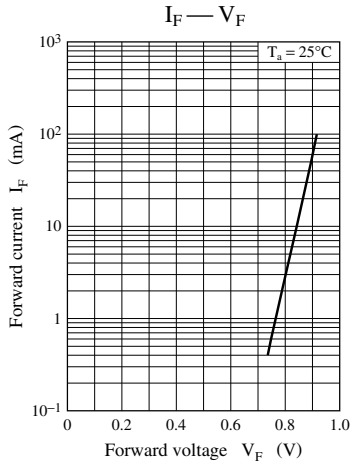
| Parameter                   | Symbol | Conditions                              | Min | Typ  | Max  | Unit     |
|-----------------------------|--------|---|-----|------|------|----------|
| Reverse current (DC)        | $I_R$  | $V_R = 33\text{ V}$                     |     | 0.01 | 100  | nA       |
| Forward voltage (DC)        | $V_F$  | $I_F = 100\text{ mA}$                   |     | 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* | $r_f$  | $I_F = 2\text{ mA}, f = 100\text{ MHz}$ |     | 0.65 | 0.85 | $\Omega$ |

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

2. Rated input/output frequency: 100 MHz

3. \* :  $r_f$  measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

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



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