

MA6X121 (MA121)

Silicon epitaxial planar type

■ Features

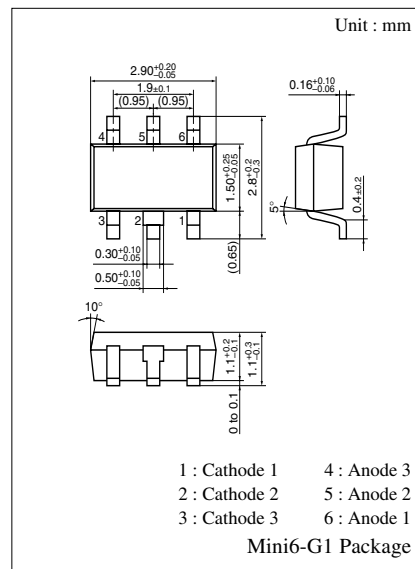
- Three-element contained in one package, allowing high-density mounting
- Short reverse recovery time t_{rr}
- Small terminal capacitance, C_t

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

| Parameter | Symbol | Rating | Unit |
|---|-----------|-------------|------------------|
| Reverse voltage (DC) | V_R | 80 | V |
| Peak reverse voltage | V_{RM} | 80 | V |
| Forward current (DC)*1 | I_F | 100 | mA |
| Peak forward current*1 | I_{FM} | 225 | mA |
| Non-repetitive peak forward surge current*1,2 | I_{FSM} | 500 | mA |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

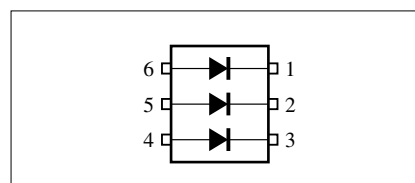
Note) *1 : Value for single diode

*2 : $t = 1 \text{ s}$



Marking Symbol: M2D

Internal Connection

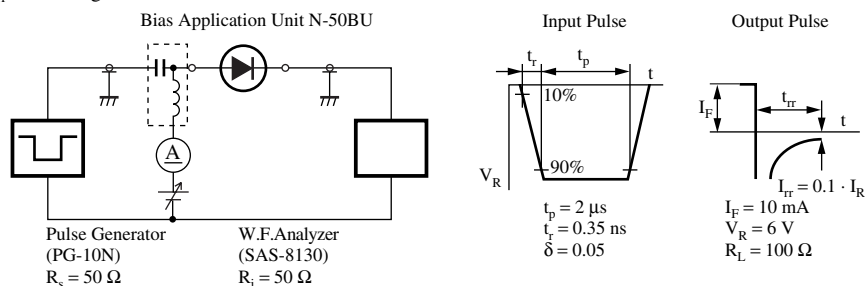


■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|------------------------|----------|--|-----|-----|-----|------|
| Reverse current (DC) | I_R | $V_R = 75 \text{ V}$ | | | 100 | nA |
| Forward voltage (DC) | V_F | $I_F = 100 \text{ mA}$ | | | 1.2 | V |
| Reverse voltage (DC) | V_R | $I_R = 100 \mu\text{A}$ | 80 | | | V |
| Terminal capacitance | C_t | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ | | | 2 | pF |
| Reverse recovery time* | t_{rr} | $I_F = 10 \text{ mA}, V_R = 6 \text{ V}$ $I_{rr} = 0.1 \cdot I_R, R_L = 100 \Omega$ | | | 3 | ns |

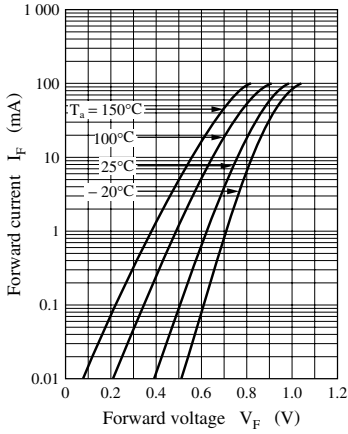
Note) 1. Rated input/output frequency: 100 MHz

2. * : t_{rr} measuring circuit

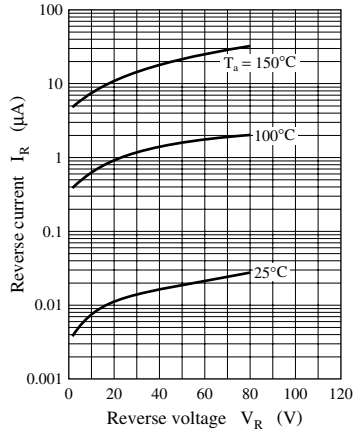


Note) The part number in the parenthesis shows conventional part number.

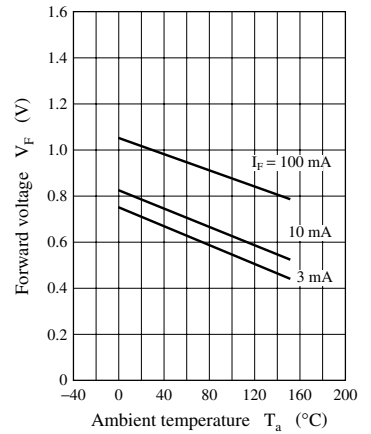
$I_F - V_F$



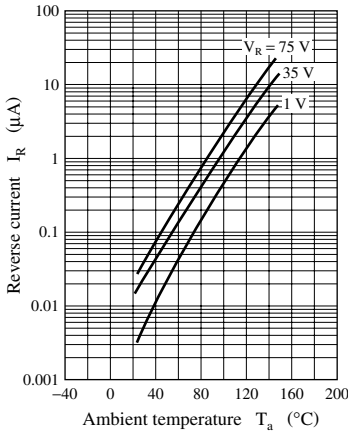
$I_R - V_R$



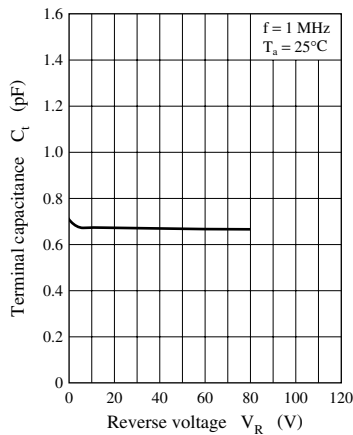
$V_F - T_a$



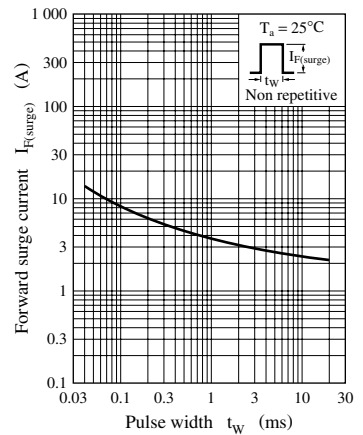
$I_R - T_a$



$C_t - V_R$



$I_{F(\text{surge})} - t_w$



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