

MA3X727 (MA727)

Silicon epitaxial planar type

For super high speed switching
For small current rectification

■ Features

- Reverse voltage $V_R = 50$ V is guaranteed
- Forward current (Average) $I_{F(AV)} = 200$ mA rectification is possible

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

| Parameter | Symbol | Rating | Unit |
|---|-------------|-------------|------------------|
| Reverse voltage | V_R | 50 | V |
| Repetitive peak reverse voltage | V_{RRM} | 50 | V |
| Peak forward current | I_{FM} | 300 | mA |
| Forward current (Average) | $I_{F(AV)}$ | 200 | mA |
| Non-repetitive peak forward surge current * | I_{FSM} | 1 | A |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

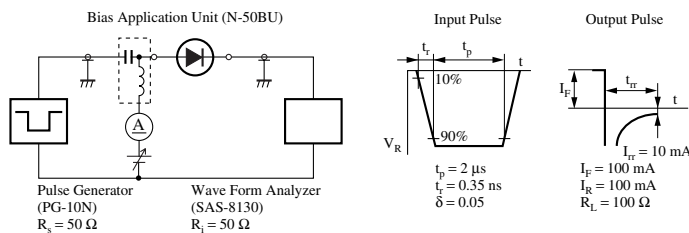
Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

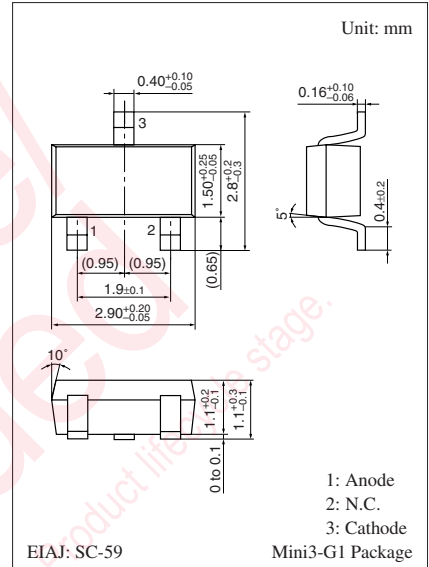
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|--|-----|-----|------|---------------|
| Forward voltage | V_{F1} | $I_F = 30$ mA | | | 0.36 | V |
| | V_{F2} | $I_F = 200$ mA | | | 0.55 | V |
| Reverse current | I_R | $V_R = 50$ V | | | 200 | μA |
| Terminal capacitance | C_t | $V_R = 0$ V, $f = 1$ MHz | | 30 | | pF |
| Reverse recovery time * | t_{rr} | $I_F = I_R = 100$ mA $I_{rr} = 10$ mA, $R_L = 100$ Ω | | 3.0 | | ns |

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

2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 1 GHz.
4. *: t_{rr} measurement circuit

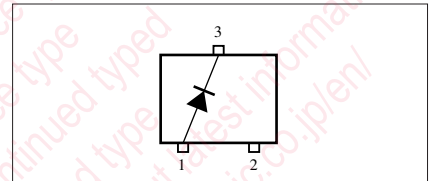


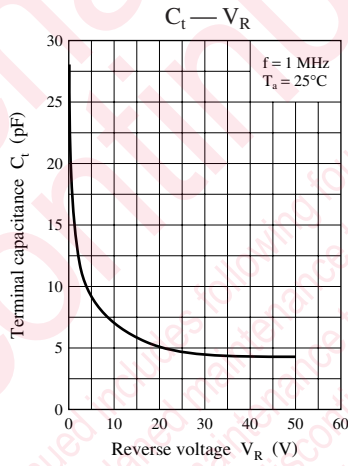
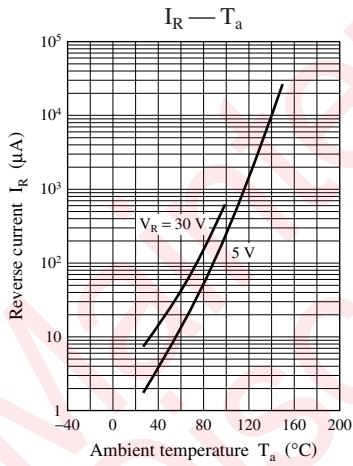
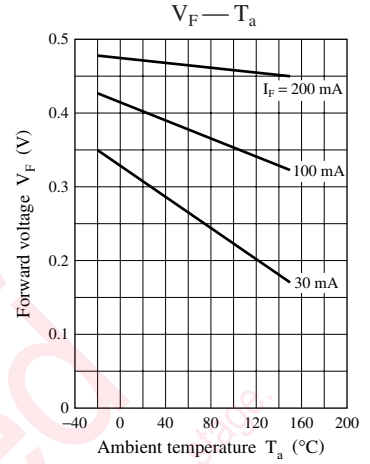
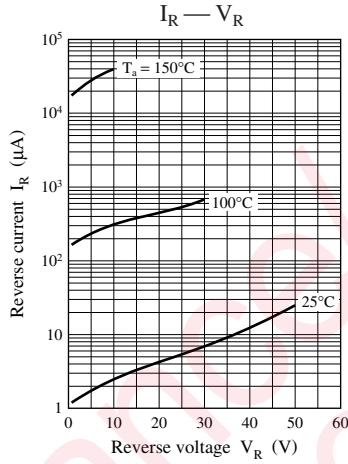
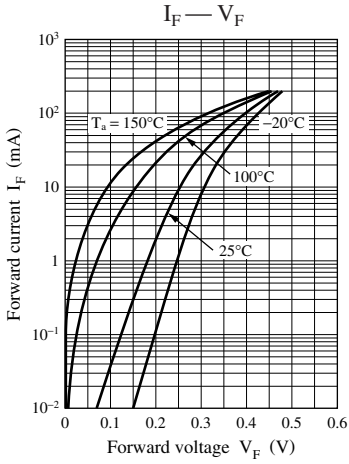
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1Z

Internal Connection





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