

MA4Z159 (MA4S159)

Silicon epitaxial planar type

For switching circuits

■ Features

- Small S-mini type 4-pin package
- Two isolated elements contained in one package, allowing high-density mounting
- Flat lead type, resulting in improved mounting efficiency and solderability with the high-speed mounting machine
- 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 |
| Average forward current | Single | $I_{F(AV)}$ | 100 |
| | Double | | 75 |
| Peak forward current | Single | I_{FM} | 225 |
| | Double | | 170 |
| Non-repetitive peak forward surge current* | Single | I_{FSM} | 500 |
| | Double | | 375 |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

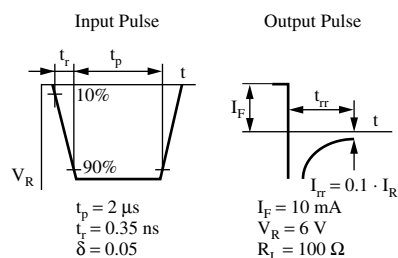
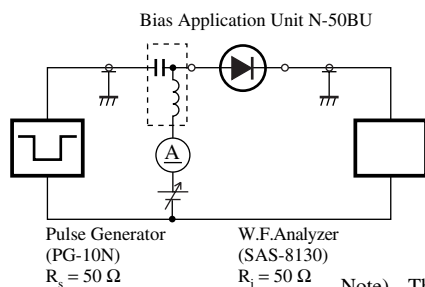
Note) *: $t = 1 \text{ s}$

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

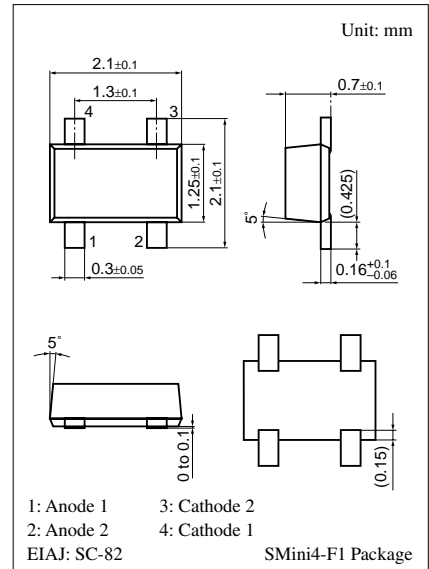
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|------------------------|----------|--|-----|------|-----|---------------|
| Reverse current (DC) | I_R | $V_R = 75 \text{ V}$ | | | 0.1 | μA |
| Forward voltage (DC) | V_F | $I_F = 100 \text{ mA}$ | | 0.95 | 1.2 | V |
| Reverse voltage (DC) | V_R | $I_R = 100 \mu\text{A}$ | 80 | | | V |
| Terminal capacitance | C_t | $V_R = 0 \text{ V}, f = 1 \text{ MHz}$ | | 0.9 | 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

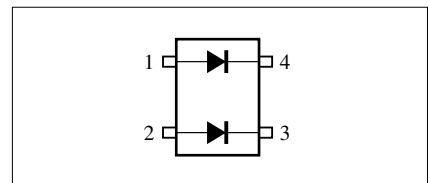


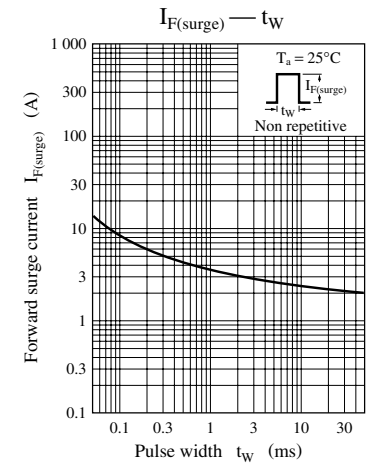
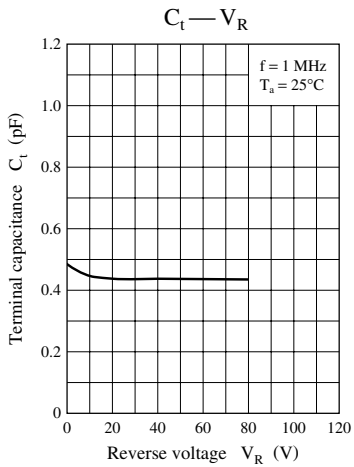
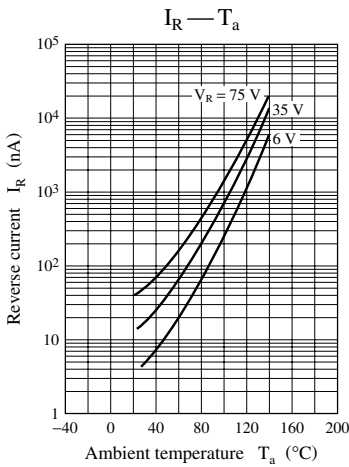
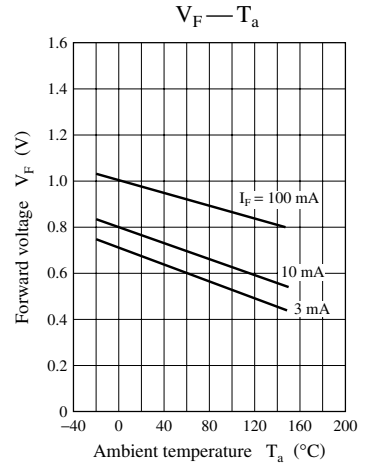
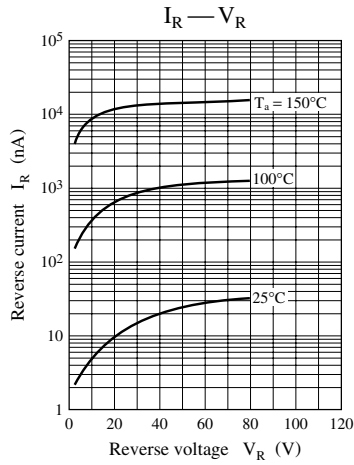
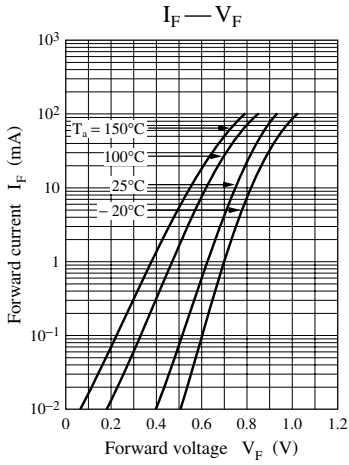
Note) The part number in the parenthesis shows conventional part number.



Marking Symbol: M1B

Internal Connection





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