

Switching diode

1SS400

●Applications

High speed switching

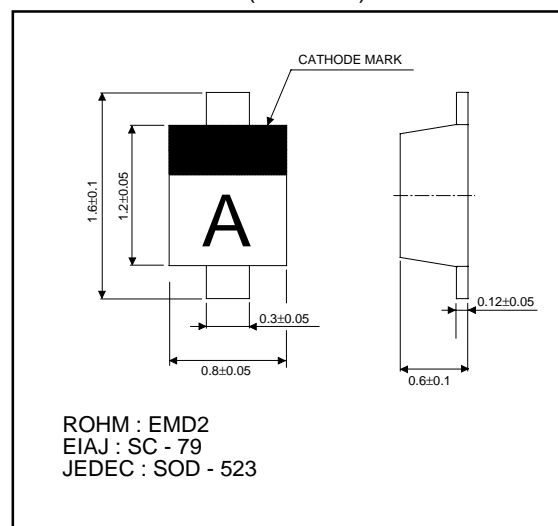
●Features

- 1) Extremely small surface mounting type.(EMD2)
- 2) High Speed.(t_{rr} =1.2ns Typ.)
- 3) High reliability.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|-------------------------|-------------|------------|------|
| Peak reverse voltage | V_{RM} | 90 | V |
| DC reverse voltage | V_R | 80 | V |
| Peak forward current | I_{FM} | 225 | mA |
| Mean rectifying current | I_o | 100 | mA |
| Surge current (1s) | I_{surge} | 500 | mA |
| Junction temperature | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 ~ +125 | °C |

●Electrical characteristics (Ta = 25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|---------|---|
| Forward voltage | V_F | — | — | 1.2 | V | $I_F=100mA$ |
| Reverse current | I_R | — | — | 0.1 | μA | $V_R=80V$ |
| Capacitance between terminals | C_T | — | 0.72 | 3.0 | pF | $V_R=0.5V$, $f=1MHz$ |
| Reverse recovery time | t_{rr} | — | — | 4 | ns | $V_R=6V$, $I_F=10mA$, $R_L=100\Omega$ |

Diodes

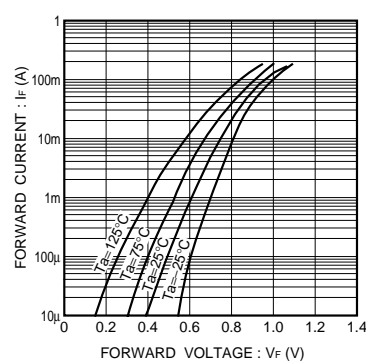
●Electrical characteristic curves ($T_a = 25^\circ\text{C}$)

Fig.1 Forward characteristics

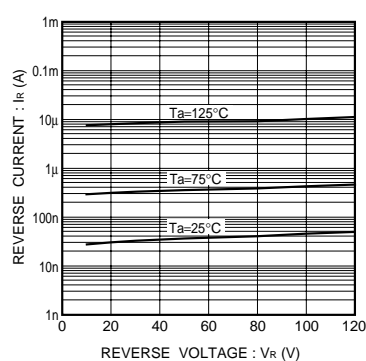


Fig.2 Reverse characteristics

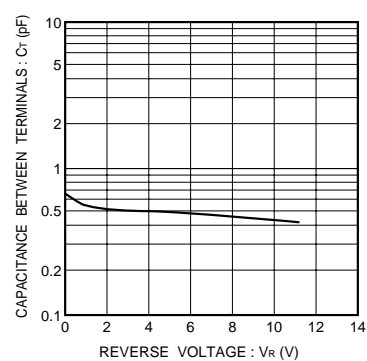


Fig.3 Capacitance between terminals

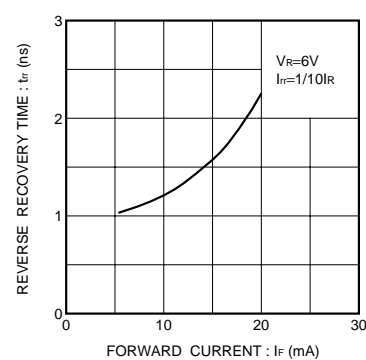


Fig.4 Reverse recovery time characteristics

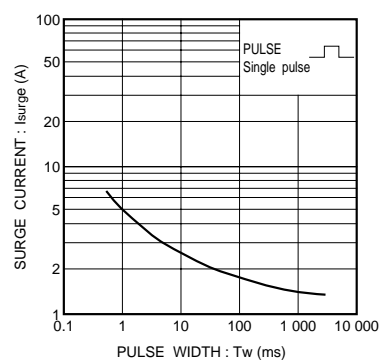
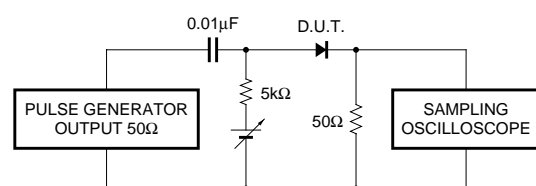


Fig.5 Surge current characteristics

Fig.6 Reverse recovery time (t_{rr}) measurement circuit

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