

Switching diode

1SS244

●Applications

High voltage switching
General purpose rectification

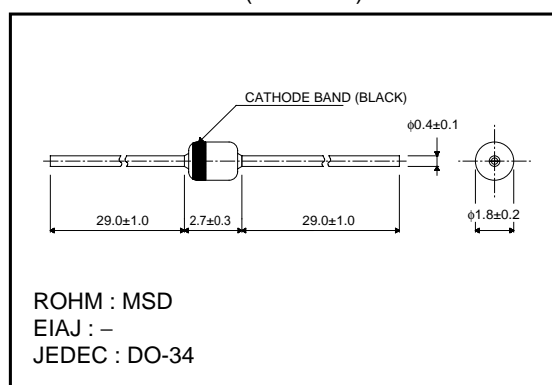
●Features

- 1) Glass sealed envelope. (MSD)
- 2) $V_{RM}=250V$ guaranteed.
- 3) High reliability.

●Construction

Silicon epitaxial planar

●External dimensions (Units : mm)



●Absolute maximum ratings ($T_a=25^\circ C$)

| Parameter | Symbol | Limits | Unit |
|-------------------------|-------------|----------|------------|
| Peak reverse voltage | V_{RM} | 250 | V |
| DC reverse voltage | V_R | 220 | V |
| Peak forward current | I_{FM} | 625 | mA |
| Mean rectifying current | I_o | 200 | mA |
| Surge current (1s) | I_{surge} | 1000 | mA |
| Power dissipation | P | 300 | mW |
| Junction temperature | T_j | 175 | $^\circ C$ |
| Storage temperature | T_{stg} | -65~+175 | $^\circ C$ |

●Electrical characteristics ($T_a=25^\circ C$)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|---------|------------------------------------|
| Forward voltage | V_F | - | - | 1.5 | V | $I_F=200mA$ |
| Reverse current | I_R | - | - | 10 | μA | $V_R=220V$ |
| Capacitance between terminals | C_T | - | - | 3 | pF | $V_R=0V, f=1MHz$ |
| Reverse recovery time | t_{rr} | - | - | 75 | ns | $I_F=20mA, I_R=20mA, R_L=50\Omega$ |

Diodes

●Electrical characteristics curves (Ta=25°C)

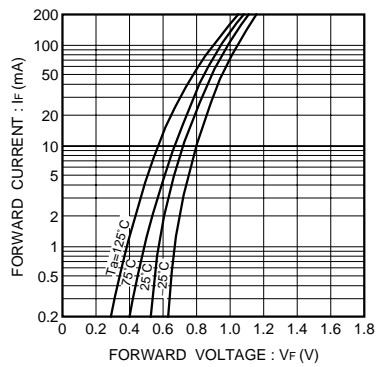


Fig.1 Forward characteristics

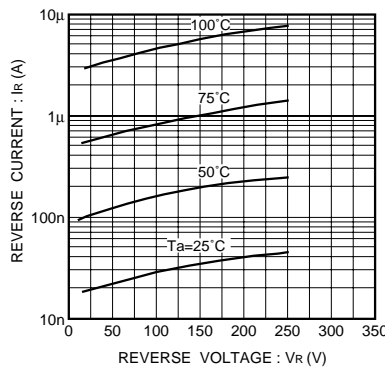


Fig.2 Reverse characteristics

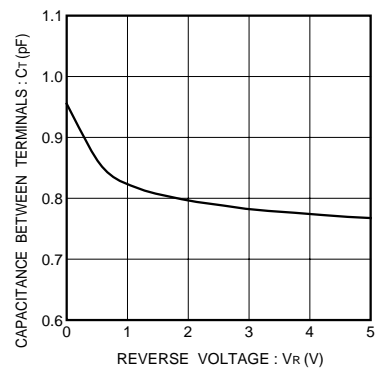


Fig.3 Capacitance between terminals characteristics

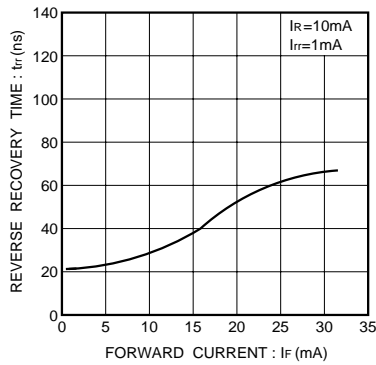


Fig.4 Reverse recovery time characteristics

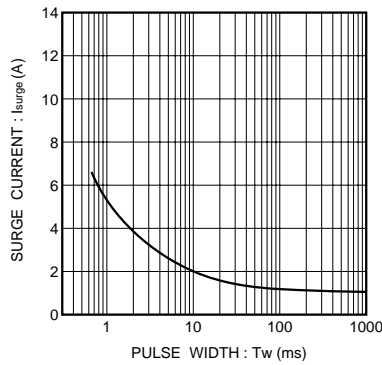


Fig.5 Surge current characteristics

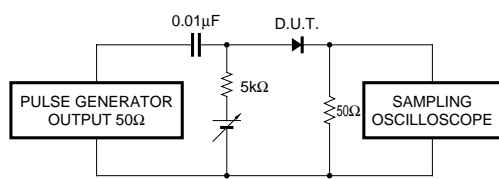


Fig.6 Reverse recovery time (trr) measurement circuit