

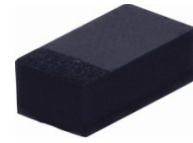
SMD Switching Diode



SMD Diodes Specialist

CDSFR4448 (RoHs Device)

$I_o = 125 \text{ mA}$
 $V_R = 80 \text{ Volts}$

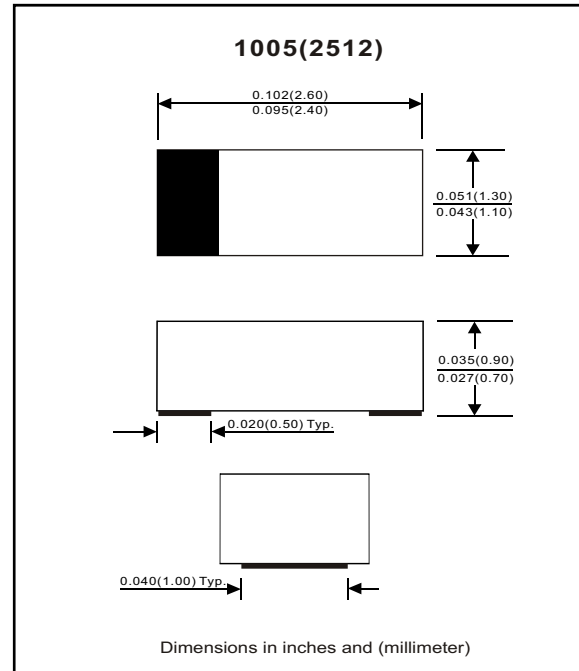


Features

- Fast Switching Speed
- Designed for mounting on small surface.
- Extremely thin/leadless package.

Mechanical data

- Case: 1005(2512) Standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.006 gram(approx.).



Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-----------------------------------|--|-----------|-----|-----|--------|------------------|
| Repetitive peak reverse voltage | | V_{RRM} | | | 100 | V |
| Reverse voltage | | V_R | | | 80 | V |
| Average forward rectified current | | I_o | | | 125 | mA |
| Forward current, surge peak | $t = 1 \text{ us}$ $t = 8.3\text{ms}$ | I_{FSM} | | | 2 1 | A |
| Storage temperature | | T_{STG} | -40 | | +125 | $^\circ\text{C}$ |
| Junction temperature | | T_j | | | +125 | $^\circ\text{C}$ |

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-------------------------------|---|----------|------|-----|-----------|------|
| Forward voltage | $I_F = 5 \text{ mA}$ $I_F = 100 \text{ mA}$ | V_F | 0.62 | | 0.72 1 | V |
| Reverse current | $V_R = 20 \text{ V}$ $V_R = 80 \text{ V}$ | I_R | | | 25 100 | nA |
| Capacitance between terminals | $f = 1 \text{ MHz}$, and 0.5 VDC reverse voltage | C_T | | | 9 | pF |
| Reverse recovery time | $I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\text{ohm}$ | T_{rr} | | | 9 | nS |

RATING AND CHARACTERISTIC CURVES (CDSFR4448)

Fig. 1 - Forward characteristics

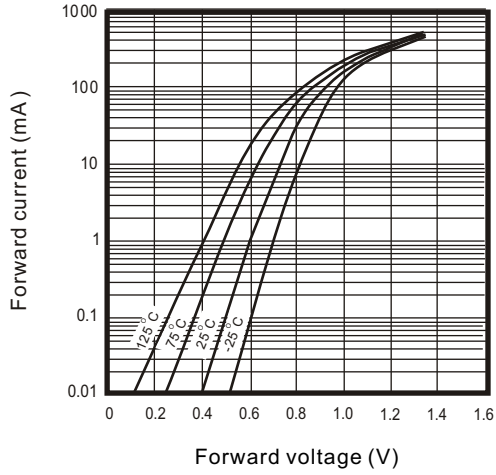


Fig. 2 - Reverse characteristics

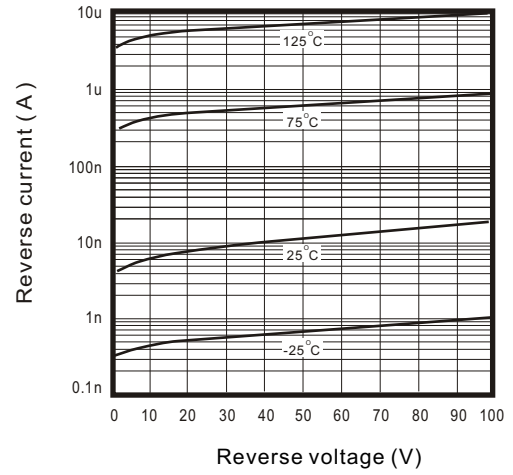


Fig. 3 - Capacitance between terminals characteristics

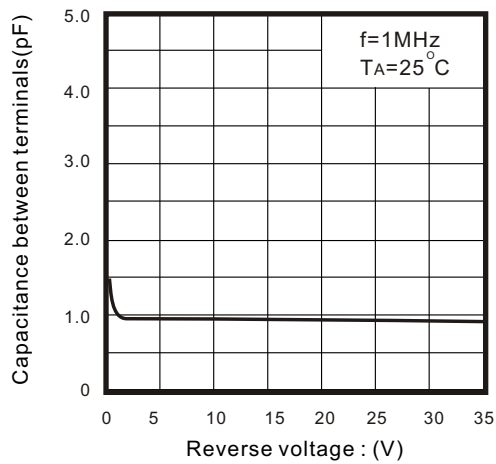


Fig. 4 - Current derating curve

