

## CDSF4448

$I_o = 125 \text{ mA}$

$V_R = 80 \text{ Volts}$

RoHS Device

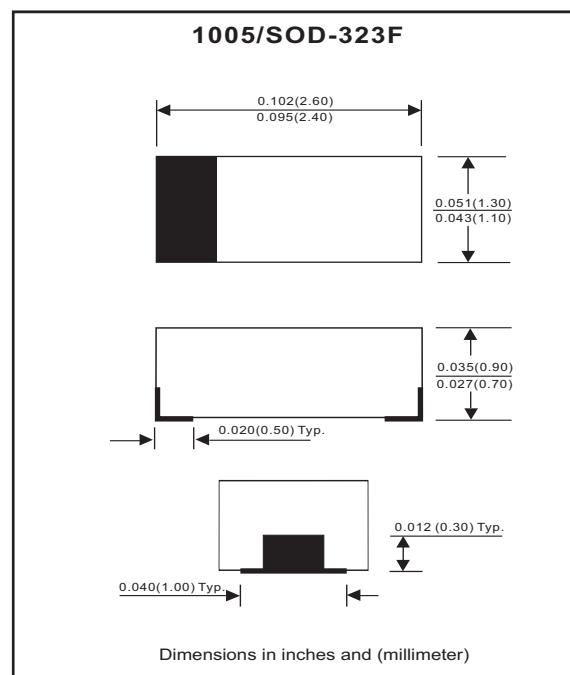


### Features

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

### Mechanical data

- Case: 1005/SOD-323F 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        | $t = 1 \text{ us}$<br>$t = 8.3 \text{ ms}$ | $I_{FSM}$ |     |     | 2<br>1 | A<br>A           |
| Storage temperature               |                                            | $T_{STG}$ | -40 |     | +125   | $^\circ\text{C}$ |
| Junction temperature              |                                            | $T_j$     | -40 |     | +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               | $I_F = 5 \text{ mA}$<br>$I_F = 100 \text{ mA}$                                    | $V_F$    | 0.62 |     | 0.72<br>1 | V<br>V   |
| Reverse current               | $V_R = 30 \text{ V}$<br>$V_R = 80 \text{ V}$                                      | $I_R$    |      |     | 25<br>100 | nA<br>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 (CDSF4448)

Fig. 1 - Forward characteristics

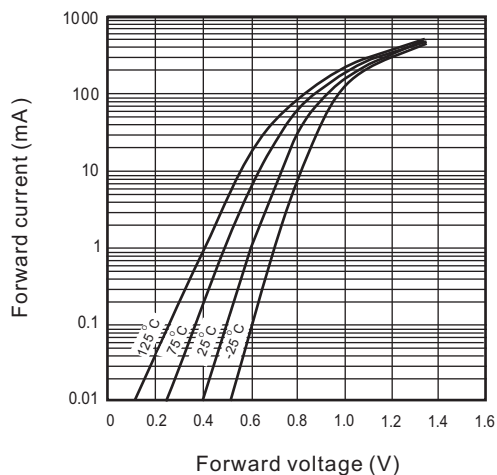


Fig. 2 - Reverse characteristics

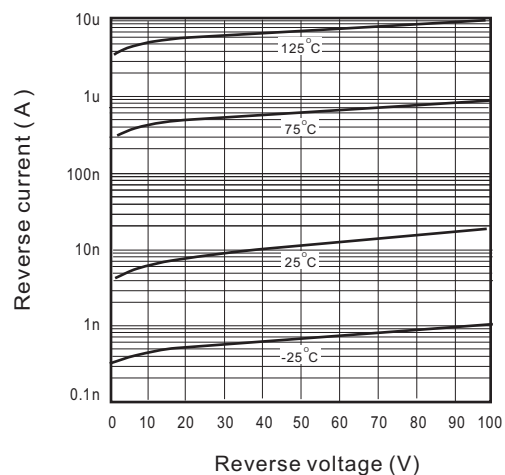


Fig. 3 - Capacitance between terminals characteristics

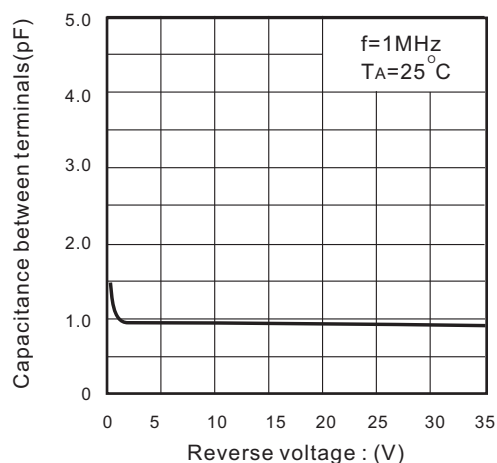


Fig. 4 - Current derating curve

