

# SMD Schottky Barrier Diode

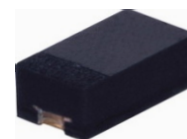


SMD Diodes Specialist

## CDBF00340 (Lead-free Device)

$I_o = 30 \text{ mA}$

$V_R = 40 \text{ Volts}$



### Features

Designed for mounting on small surface.

Extremely thin package.

Low stored charge.

Majority carrier conduction.

### Mechanical data

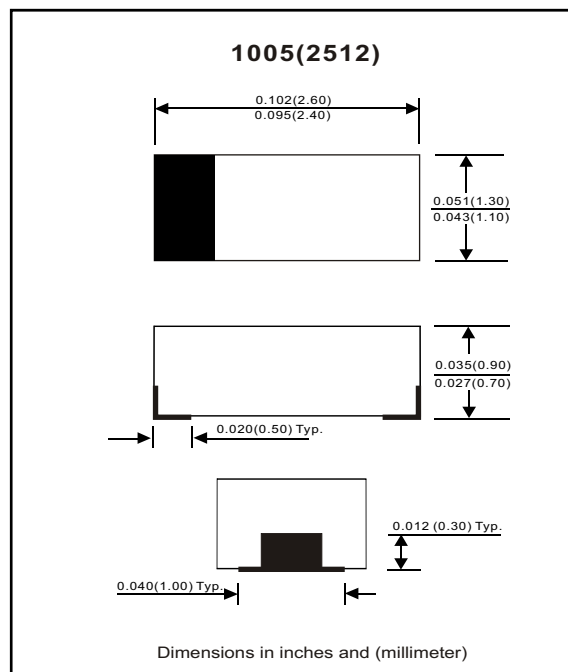
Case: 1005(2512) standard package,  
molded plastic.

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 |                                                                      | $V_{RRM}$ |     |     | 45   | V                  |
| Reverse voltage                 |                                                                      | $V_R$     |     |     | 40   | V                  |
| Average forward current         |                                                                      | $I_o$     |     |     | 30   | mA                 |
| Forward current,surge peak      | 8.3 ms single half sine-wave superimposed on rate load(JEDEC method) | $I_{FSM}$ |     | 500 |      | mA                 |
| Power Dissipation               |                                                                      | $P_D$     |     |     | 200  | mW                 |
| Snction 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               | $I_F = 1 \text{ mA DC}$                       | $V_F$  |     |     | 0.37         | V             |
| Reverse current               | $V_R = 30 \text{ V}$<br>$V_R = 40 \text{ V}$  | $I_R$  |     |     | 0.50<br>1.00 | $\mu\text{A}$ |
| Capacitance between terimnals | $F = 1 \text{ MHz}$ and 1 VDC reverse voltage | $C_T$  |     | 1.5 |              | pF            |

## RATING AND CHARACTERISTIC CURVES (CDBF00340)

Fig. 1 - Forward characteristics

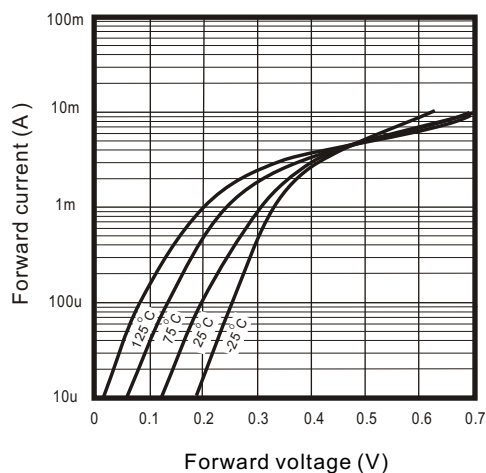


Fig. 2 - Reverse characteristics

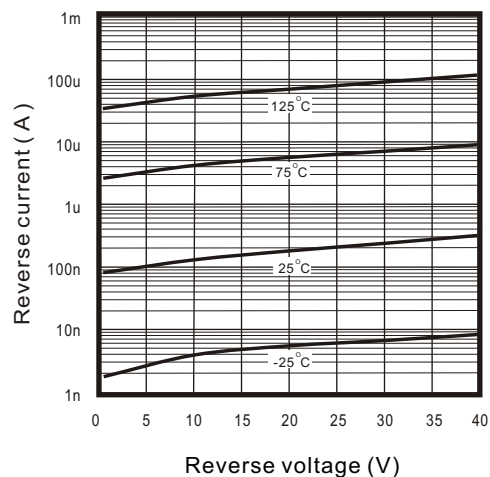


Fig.3 - Capacitance between terminals characteristics

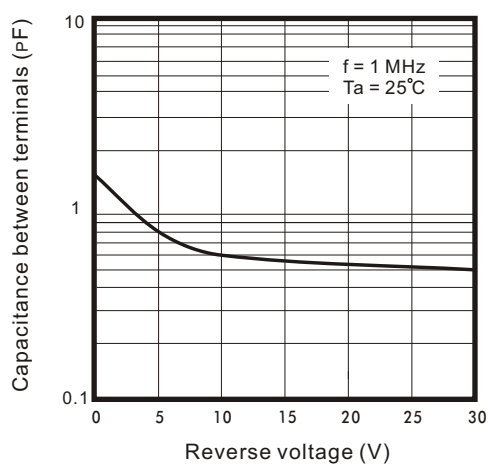


Fig.4 - Current derating curve

