

SMD Schottky Barrier Diode

CDBFR00340 (RoHs Device)

$I_o = 30 \text{ mA}$

$V_R = 40 \text{ Volts}$

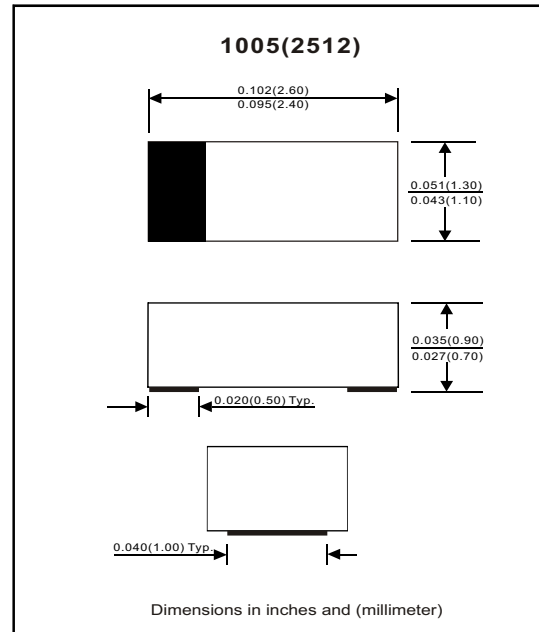


Features

- 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 |
| 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 | $I_F = 1 \text{ mA DC}$ | V_F | | | 0.37 | V |
| Reverse current | $V_R = 30\text{V}$ $V_R = 40\text{V}$ | I_R | | | 0.50 1.00 | μA |
| Capacitance between terminals | $F = 1 \text{ MHz}$ and 1 VDC reverse voltage | C_T | | 1.5 | | pF |

RATING AND CHARACTERISTIC CURVES (CDBFR00340)

Fig. 1 - Forward characteristics

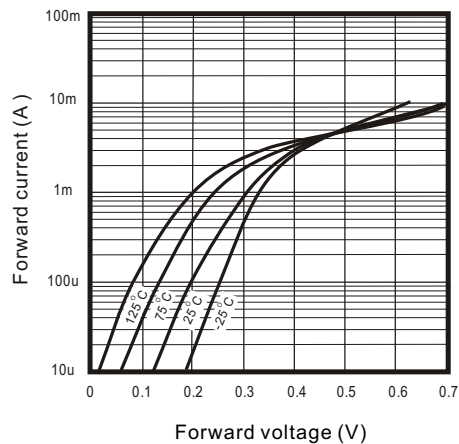


Fig. 2 - Reverse characteristics

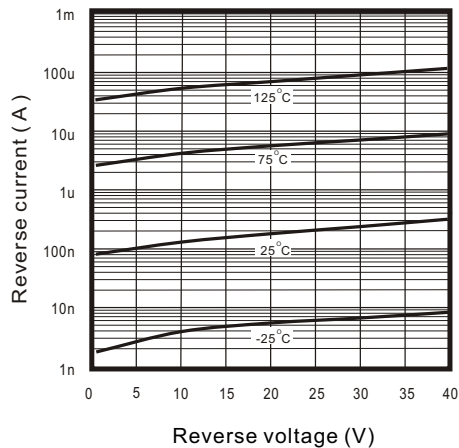


Fig.3 - Capacitance between terminals characteristics

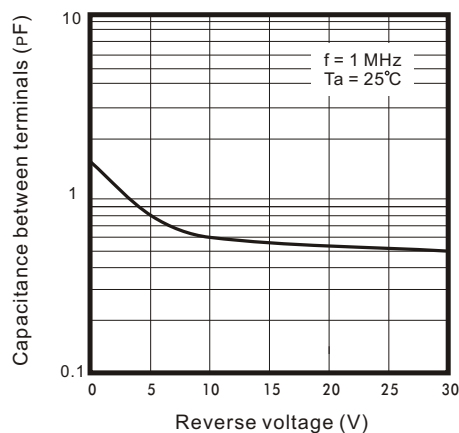


Fig.4 - Current derating curve

