

# SMD Schottky Barrier Diode



SMD Diodes Specialist

## CDBF0140L (Lead-free Device)

$I_o = 100 \text{ mA}$   
 $V_R = 40 \text{ Volts}$

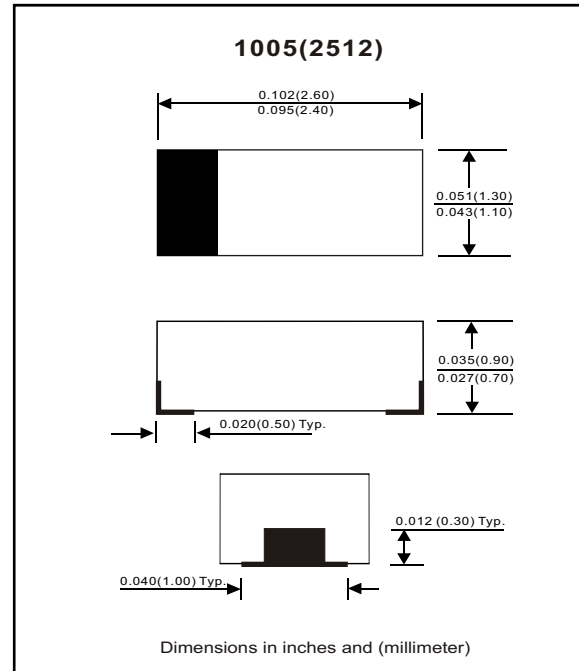


### Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- 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 rectified current		$I_o$			100	mA
Forward current, surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$			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	$I_F = 100\text{mA}$ $I_F = 10\text{mA}$	$V_F$			0.55 0.34	V
Reverse current	$V_R = 10\text{V}$	$I_R$			30	$\mu\text{A}$
Capacitance between terminals	$f = 1 \text{ MHz}$ , and 10 VDC reverse voltage	$C_T$		6		pF

## RATING AND CHARACTERISTIC CURVES (CDBF0140L)

Fig. 1 - Forward characteristics

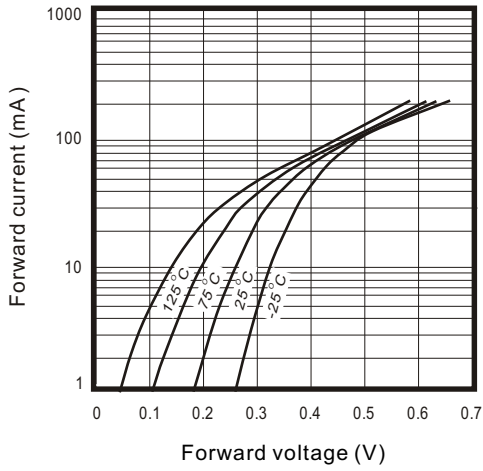


Fig. 2 - Reverse characteristics

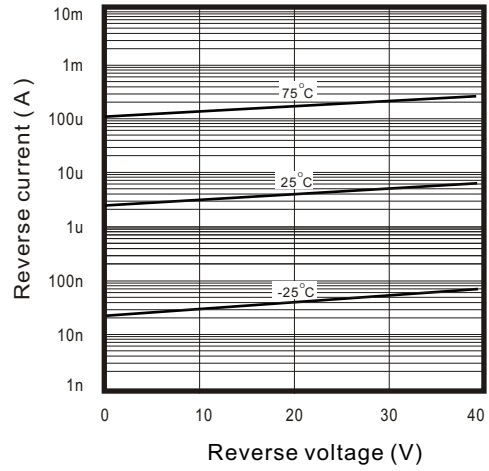


Fig. 3 - Capacitance between terminals characteristics

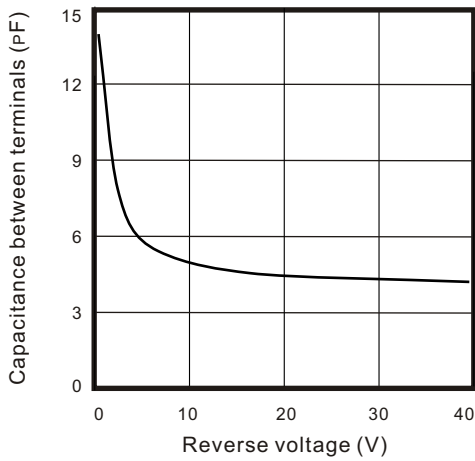


Fig. 4 - Current derating curve

