

# SMD Schottky Barrier Diode

## CDBF0140R (Lead-free Device)

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

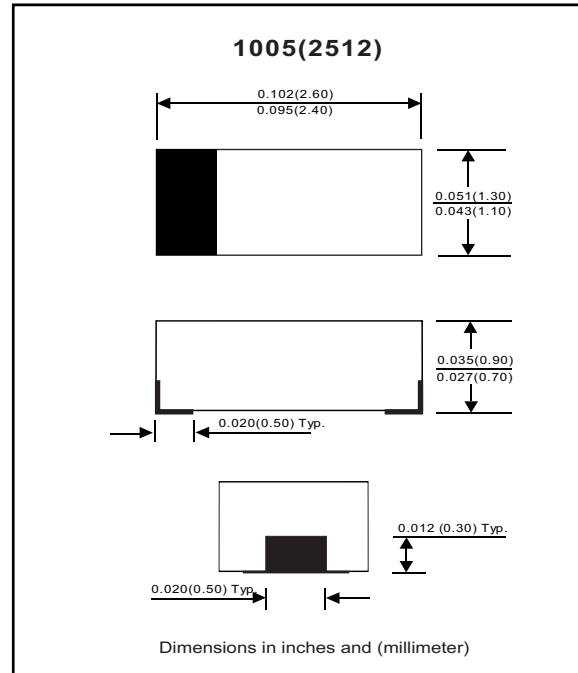


### Features

- 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 (approximately).



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		$V_{RM}$			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		$T_j$	-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	$I_F = 10 \text{ mA}$	$V_F$			0.45	V
Reverse current	$V_R = 10 \text{ V}$	$I_R$			1	$\mu\text{A}$
Capacitance between terminals	$f = 1 \text{ MHz}$ , and 10 VDC reverse voltage	$C_T$		6		pF

## RATING AND CHARACTERISTIC CURVES (CDBF0140R)

Fig. 1 - Forward characteristics

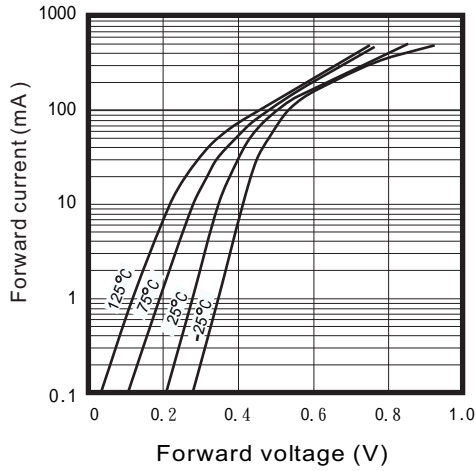


Fig. 2 - Reverse characteristics

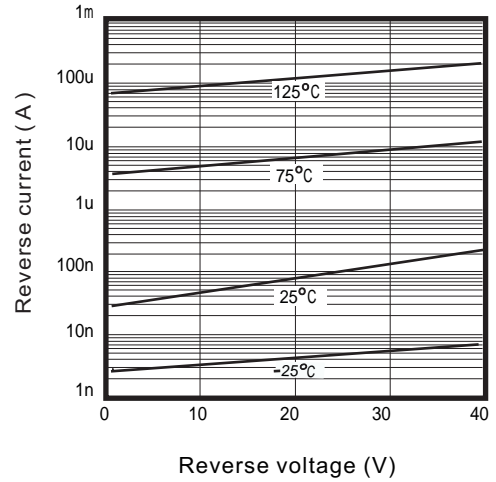


Fig. 3 - Capacitance between terminals characteristics

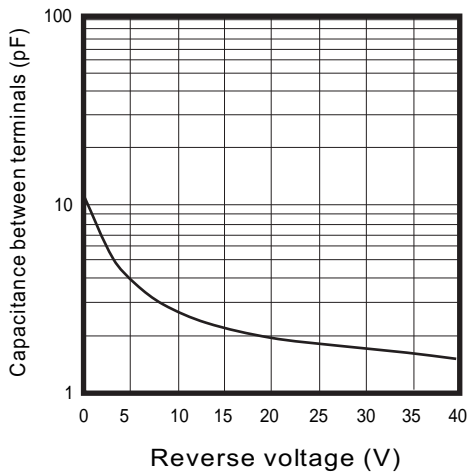


Fig. 4 - Current derating curve

