

# SMD Schottky Barrier Diode



SMD Diodes Specialist

## CDBFR0245 (RoHS Device)

$I_o = 200 \text{ mA}$   
 $V_R = 45 \text{ Volts}$

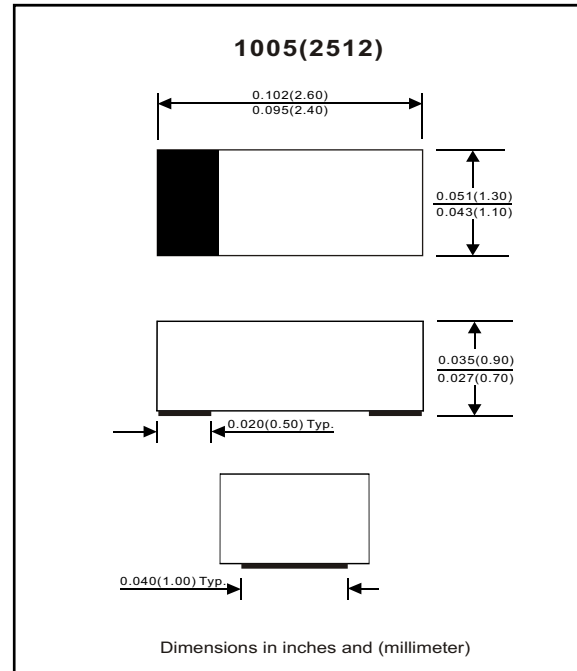


### Features

- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low leakage current ( $I_R = 0.1 \mu\text{A}$  typ. @  $V_R = 10\text{V}$ ).
- 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		$V_{RRM}$			50	V
Reverse voltage		$V_R$			45	V
Average forward current		$I_o$			200	mA
Forward current, surge peak	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$		3000		mA
Power Dissipation		$P_D$			250	mW
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	$I_F = 200 \text{ mA DC}$	$V_F$			0.55	V
Reverse current	$V_R = 10 \text{ V}$	$I_R$			1	$\mu\text{A}$
Capacitance between terminals	$f = 1 \text{ MHz}$ , and 10VDC reverse voltage	$C_T$		9		pF

## RATING AND CHARACTERISTIC CURVES (CDBFR0245)

Fig. 1 - Forward characteristics

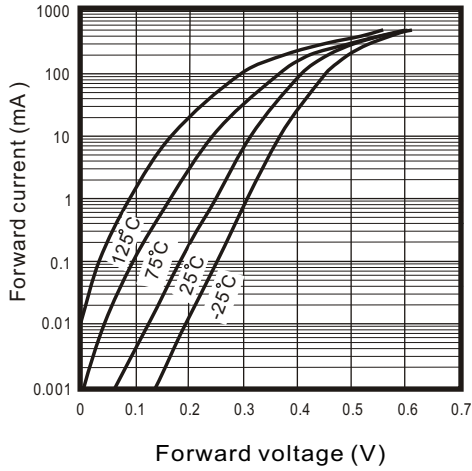


Fig. 2 - Reverse characteristics

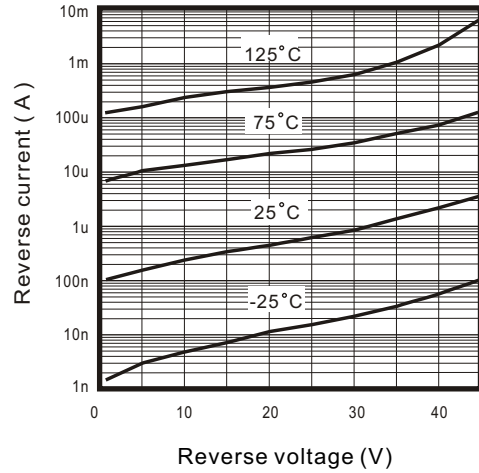


Fig. 3 - Capacitance between terminals characteristics

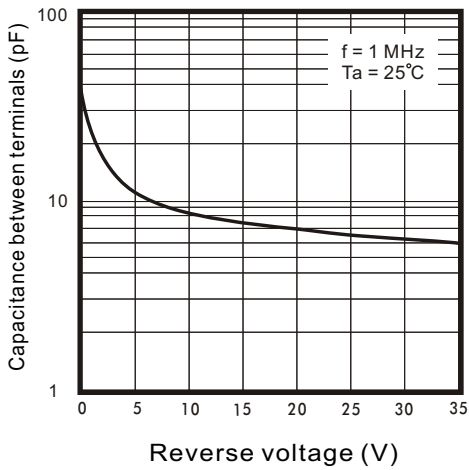


Fig. 4 - Current derating curve

