

# SMD Schottky Barrier Diode



SMD Diodes Specialist

## CDBUR001A(RoHs Device)

$I_o = 100\text{mA}$   
 $V_R = 30\text{ Volts}$

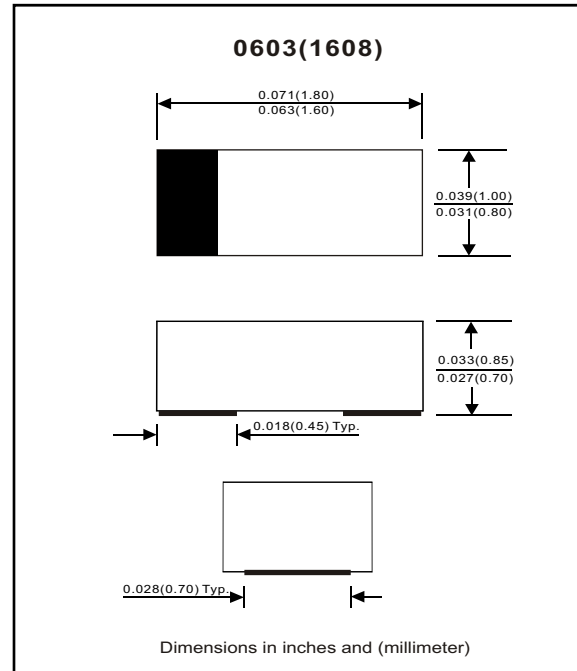


### Features

- Designed for mounting on small surface.
- Extremely thin package.
- Low stored charge.
- Majority carrier conduction.

### Mechanical data

- Case: 0603(1608) standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.003 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		$V_{RRM}, V_R$			30	V
Average forward current		$I_o$			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	$I_{FSM}$		500		mA
Power Dissipation		$P_D$			150	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 1	$I_F = 0.1\text{ mA DC}$	$V_F$			0.24	V
Forward voltage 2	$I_F = 1\text{ mA DC}$	$V_F$			0.32	V
Forward voltage 3	$I_F = 10\text{ mA DC}$	$V_F$			0.40	V
Forward voltage 4	$I_F = 30\text{ mA DC}$	$V_F$			0.50	V
Forward voltage 5	$I_F = 100\text{ mA DC}$	$V_F$			1.00	V
Reverse current	$V_R = 25\text{V}$	$I_R$			2	$\mu\text{A}$
Capacitance between terimnals	$F = 1\text{ MHz}$ and 10 VDC reverse voltage	$C_T$			6	pF

## RATING AND CHARACTERISTIC CURVES (CDBUR001A)

Fig. 1 - Forward characteristics

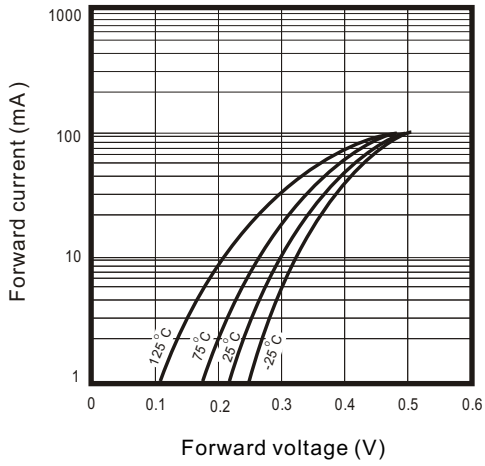


Fig. 2 - Reverse characteristics

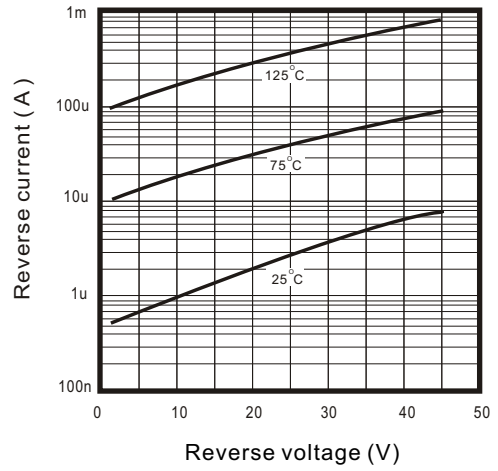


Fig.3 - Capacitance between terminals characteristics

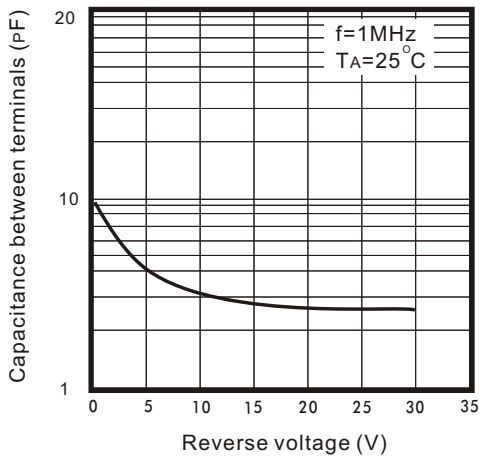


Fig.4 - Current derating curve

