

# SMD Schottky Barrier Diode

## CDBU00340 (Lead-free Device)

$I_o = 30 \text{ mA}$   
 $V_R = 40 \text{ Volts}$

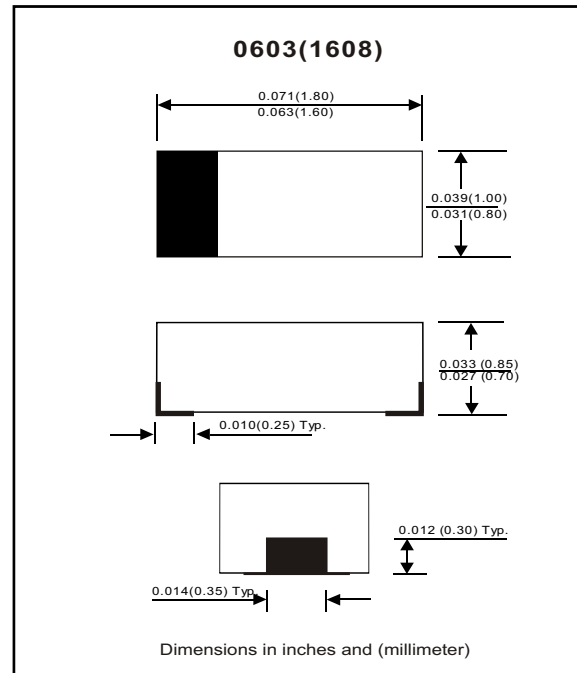


### Features

- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Low capacitance.
- 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 (approximately).



### 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		$P_D$			150	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	$I_F = 1 \text{ mA DC}$	$V_F$			0.37	V
Reverse current	$V_R = 30 \text{ V}$ $V_R = 40 \text{ V}$	$I_R$			0.5 1	$\mu\text{A}$
Capacitance between terminals	$f = 1 \text{ MHz}$ , and 1 VDC reverse voltage	$C_T$		1.5		pF

## RATING AND CHARACTERISTIC CURVES (CDBU00340)

Fig. 1 - Forward characteristics

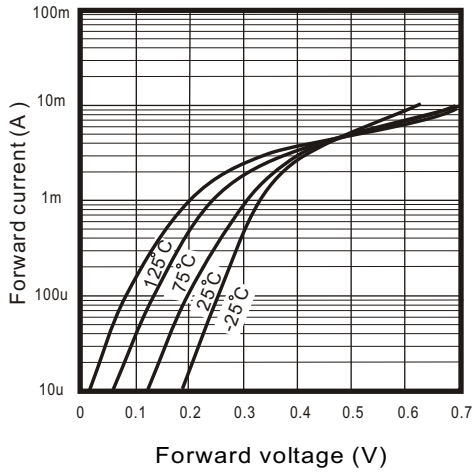


Fig. 2 - Reverse characteristics

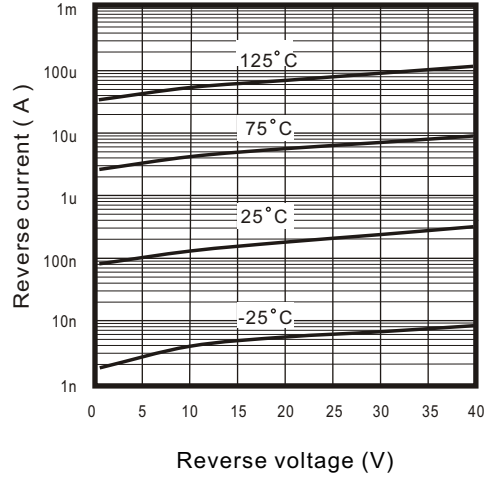


Fig. 3 - Capacitance between terminals characteristics

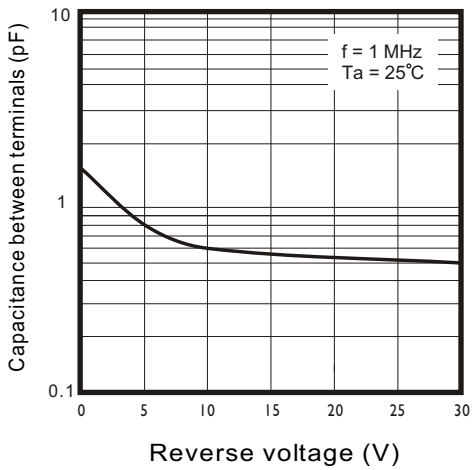


Fig. 4 - Current derating curve

