

SMD Schottky Barrier Diode



SMD Diodes Specialist

CDBU001A

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

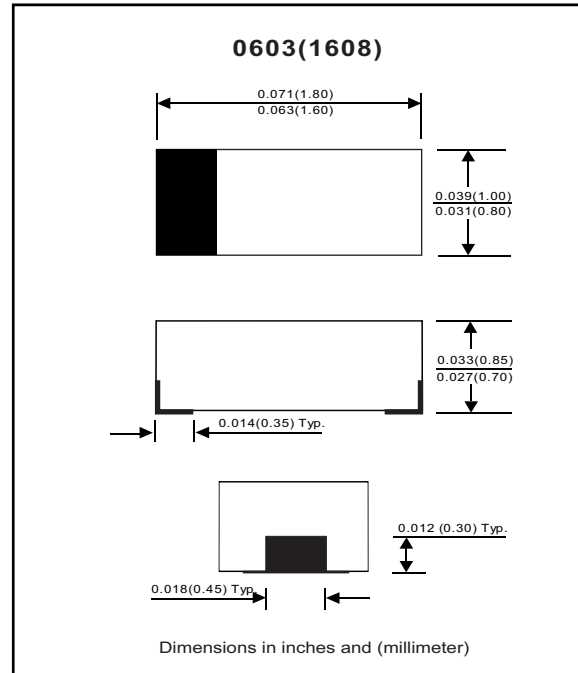


Features

- 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: Solder 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}, 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
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 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	μA
Capacitance between terminals	$F=1\text{MHz}$ and 10V DC reverse voltage	C_T			6	pF

RATING AND CHARACTERISTIC CURVES (CDBU001A)

Fig. 1 - Forward characteristics

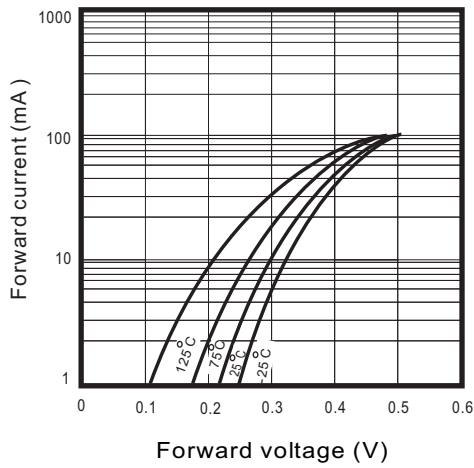


Fig. 2 - Reverse characteristics

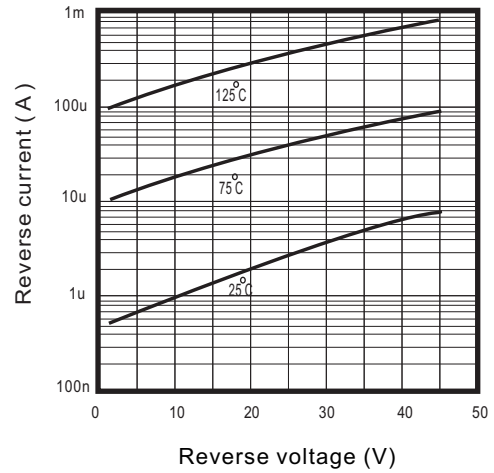


Fig. 3 - Capacitance between terminals characteristics

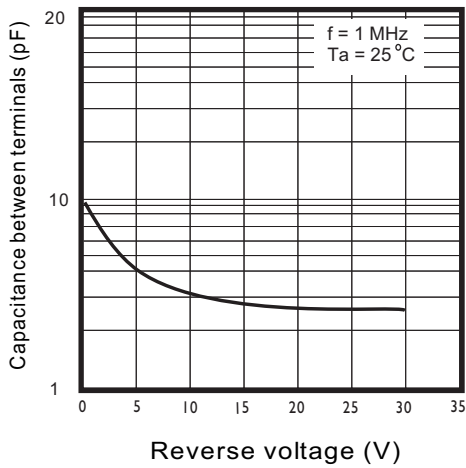


Fig. 4 - Current derating curve

