

# SMD Switching Diode



SMD Diodes Specialist

## CDSUR4448(RoHs Device)

$I_o = 125 \text{ mA}$   
 $V_R = 80 \text{ Volts}$

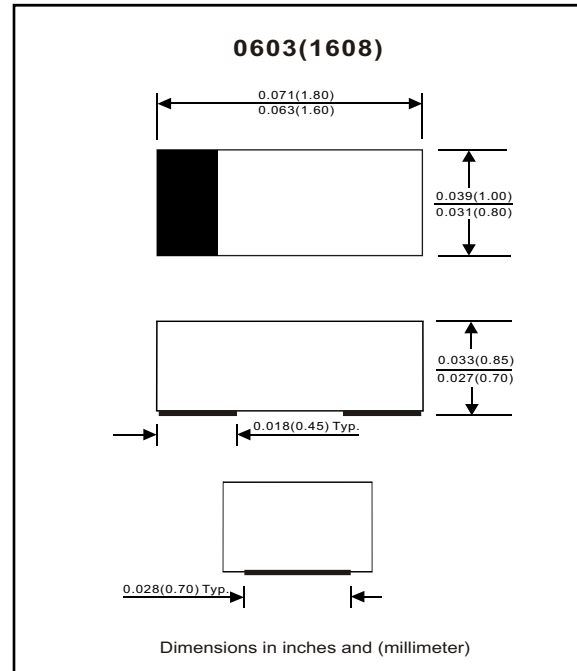


### Features

- Fast Switching Speed
- Designed for mounting on small surface.
- Extremely thin/leadless package.

### 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		$V_{RRM}$			100	V
Reverse voltage		$V_R$			80	V
Average forward rectified current		$I_o$			125	mA
Forward current, surge peak	$t = 1 \text{ us}$ $t = 8.3\text{ms}$	$I_{FSM}$			2 1	A
Storage 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	$I_F = 5 \text{ mA}$ $I_F = 100 \text{ mA}$	$V_F$	0.62		0.72 1	V
Reverse current	$V_R = 20 \text{ V}$ $V_R = 80 \text{ V}$	$I_R$			25 100	nA
Capacitance between terminals	$f = 1 \text{ MHz}$ , and 0.5 VDC reverse voltage	$C_T$			9	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\text{ohm}$	$T_{rr}$			9	nS

## RATING AND CHARACTERISTIC CURVES (CDSUR4448)

Fig. 1 - Forward characteristics

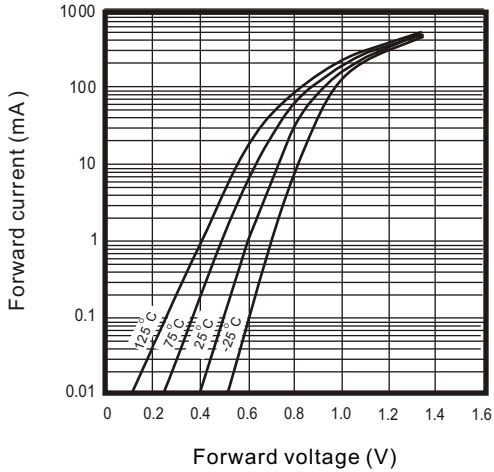


Fig. 2 - Reverse characteristics

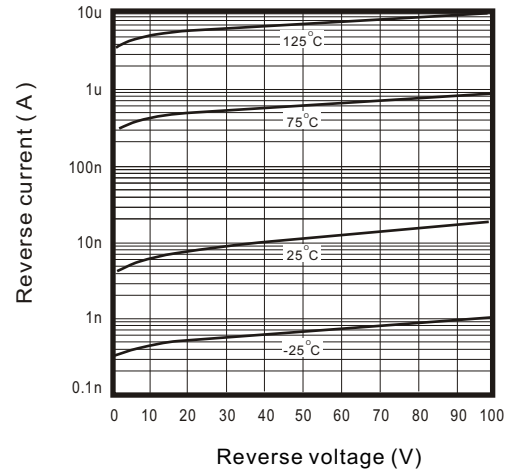


Fig. 3 - Capacitance between terminals characteristics

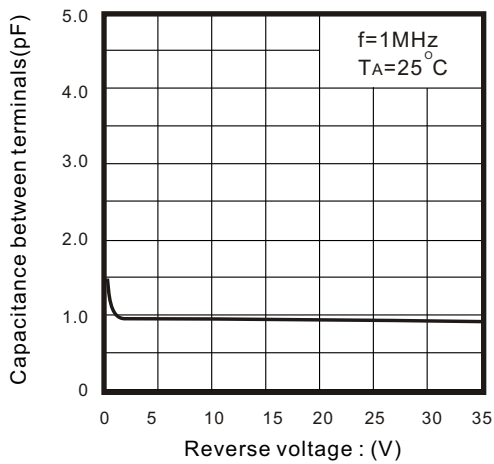


Fig. 4 - Current derating curve

