

SMD Switching Diode



SMD Diodes Specialist

CDSU4448 (RoHs Device)

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

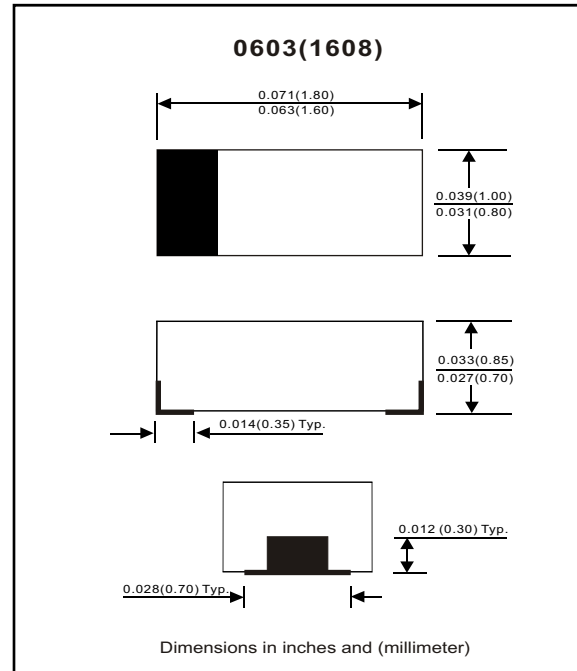


Features

- 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 (CDSU4448)

Fig. 1 - Forward characteristics

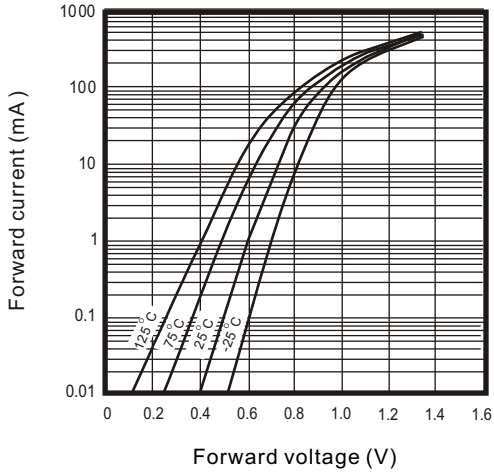


Fig. 2 - Reverse characteristics

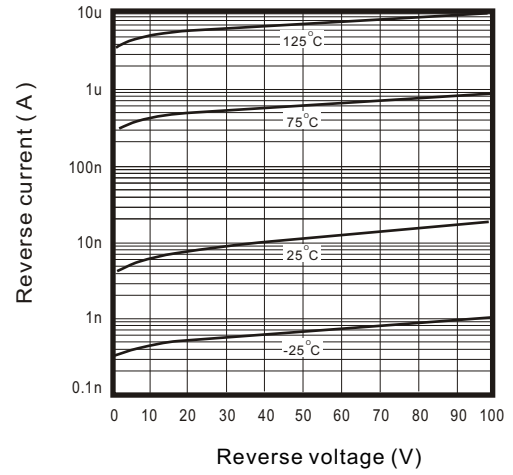


Fig. 3 - Capacitance between terminals characteristics

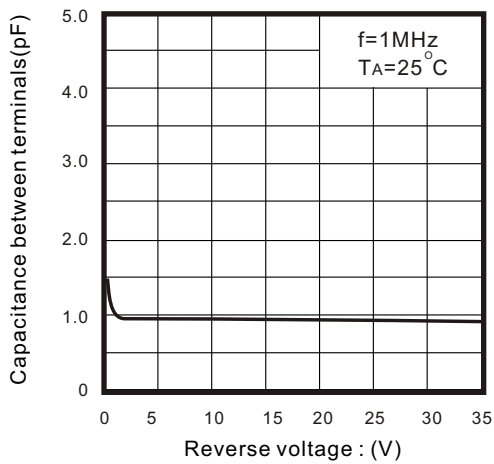


Fig. 4 - Current derating curve

