

SMD Switching Diode



SMD Diodes Specialist

CDSF4448 (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

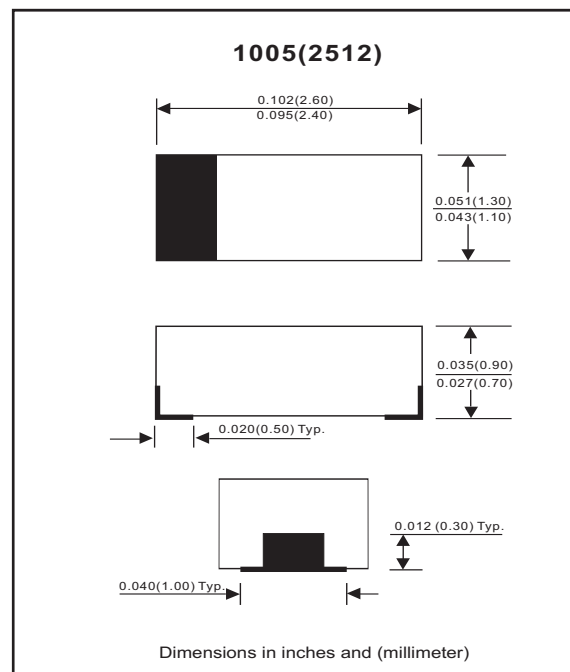
Case: SOD-323F (2512) Standard package , molded plastic.

Terminals: Gold plated, solderable per MIL-STD-750, method 2026.

Polarity: Indicated by cathode band.

Mounting position: Any.

Weight: 0.006 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 A
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	$I_F = 5\text{ mA}$ $I_F = 100\text{ mA}$	V_F	0.62		0.72 1	V V
Reverse current	$V_R = 20\text{ V}$ $V_R = 80\text{ V}$	I_R			25 100	nA 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

REV:B

RATING AND CHARACTERISTIC CURVES (CDSF4448)

Fig. 1 - Forward characteristics

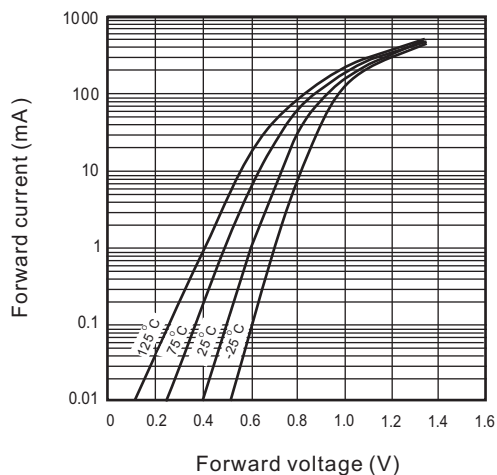


Fig. 2 - Reverse characteristics

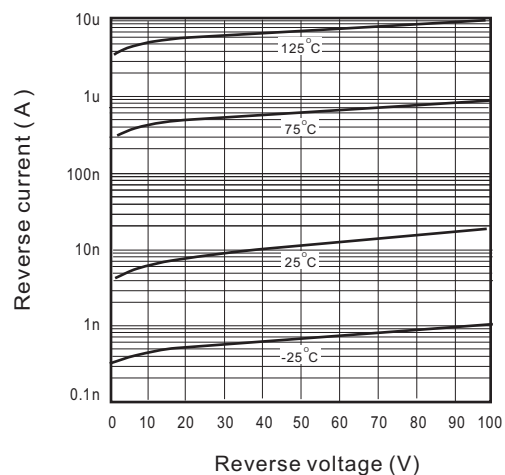


Fig. 3 - Capacitance between terminals characteristics

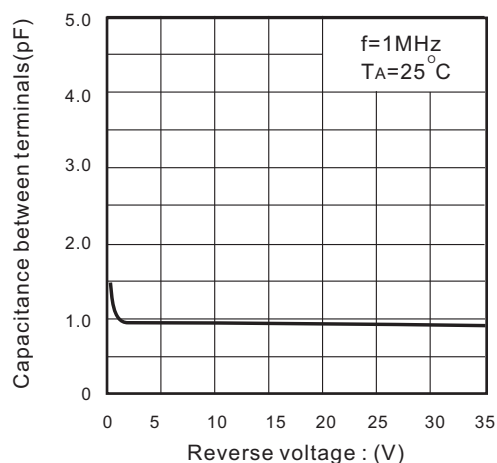


Fig. 4 - Current derating curve

