

High Speed Switching Diode

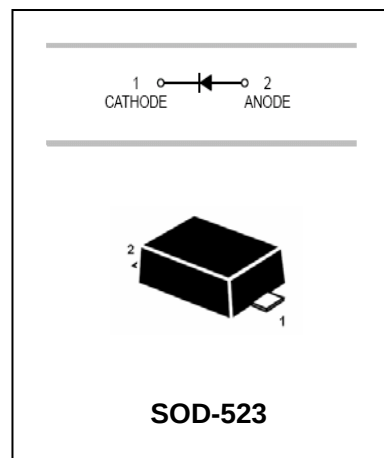
1N4448WT

FEATURES

- Fast switching speed.
- Surface mount package Ideally suited
For automatic insertion.
- For general purpose switching application.
- High conductance.



Lead-free



APPLICATIONS

- Fast switching surface mount diode.

ORDERING INFORMATION

Type No.	Marking	Package Code
1N4448WT	T5	SOD-523

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	V
Peak repetitive reverse voltage	V_{RRM}	75	V
Working peak reverse voltage	V_{RWM}	75	V
DC blocking voltage	V_R	75	V
RMS reverse voltage	$V_{R(RMS)}$	53	V
Average rectified output current	I_O	250	mA
Non-Repetitive peak forward surge current	I_{FSM}	4.0 2.0	A
		$t=1.0\mu s$ $t=1.0s$	
Total power dissipation	P_{tot}	400	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	315	°C/W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	75				$I_R=10\mu A$
Forward voltage	V_F	0.62		0.72	V	$I_F=5mA$
				0.855	V	$I_F=10mA$
				1.0	V	$I_F=100mA$
				1.25	V	$I_F=150mA$
Reverse current	I_R			2.5	μA	$V_R=75V$
				50	μA	$V_R=75V, T_j=150^\circ C$
				30	μA	$V_R=25V, T_j=150^\circ C$
				25	nA	$V_R=20V$
Diode capacitance	C_d			4.0	pF	$V_R=0, f=1.0MHz$
Reverse recovery time	t_{rr}			4.0	ns	$I_F=I_R=10mA, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

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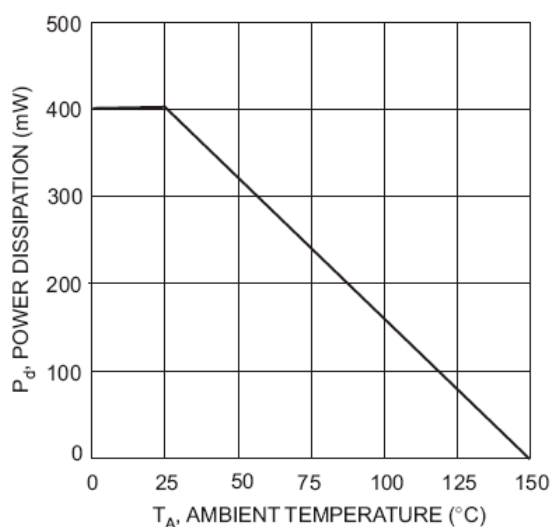


Fig. 1 Power Derating Curve

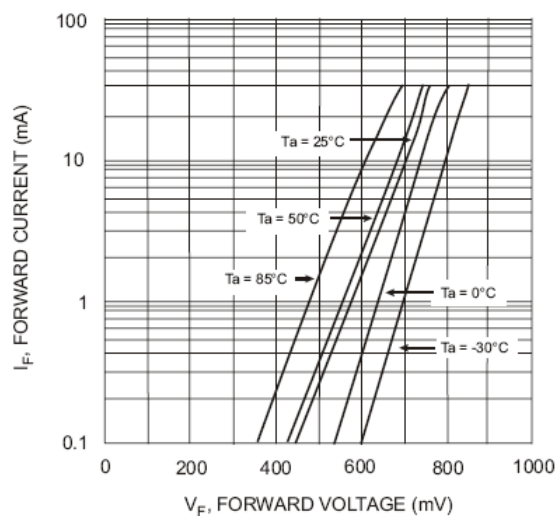


Fig. 2 Typical Forward Characteristics

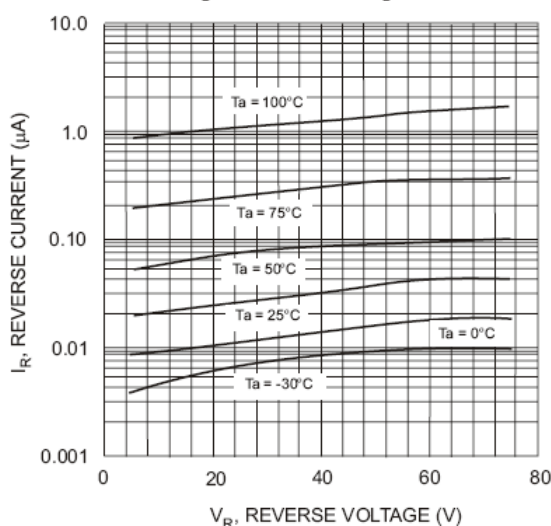


Fig. 3 Typical Reverse Characteristics

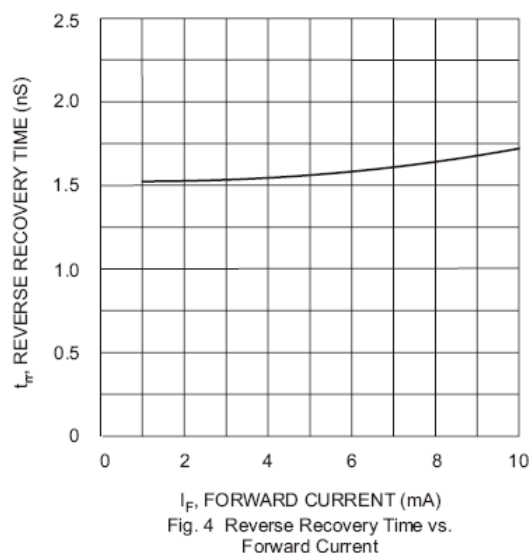


Fig. 4 Reverse Recovery Time vs. Forward Current

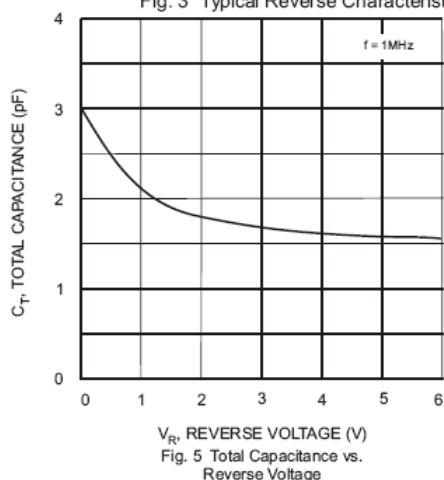


Fig. 5 Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

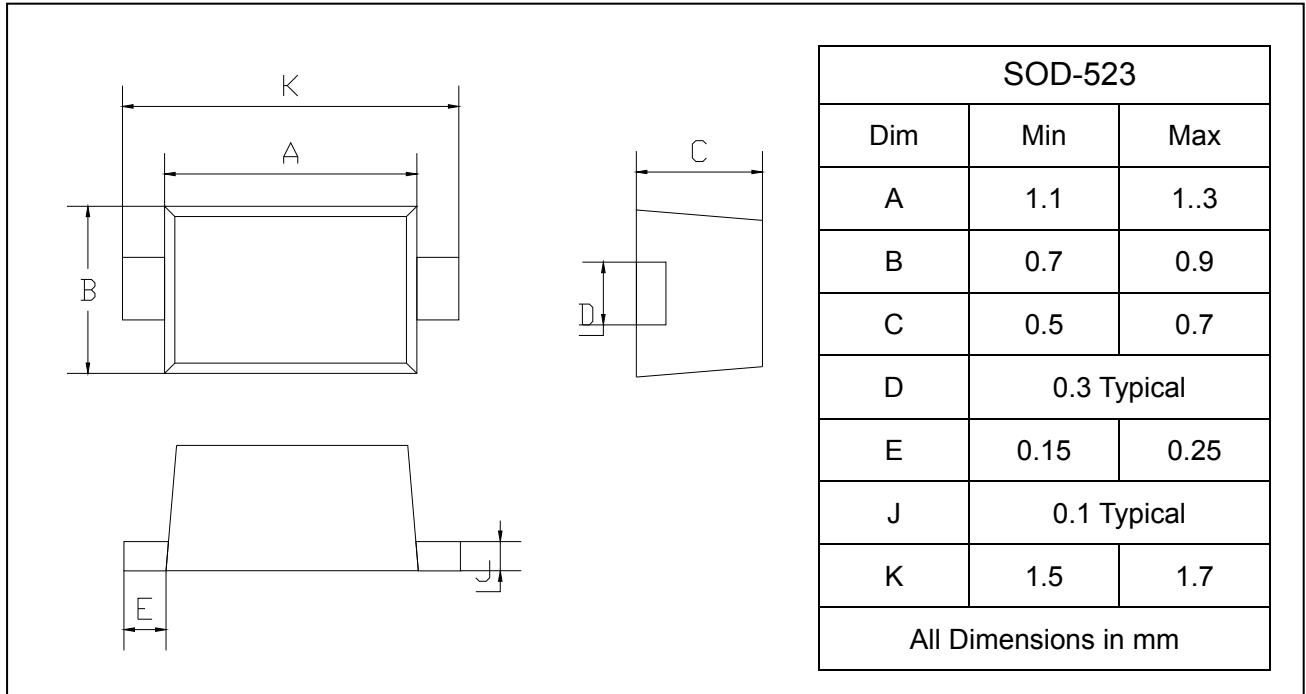


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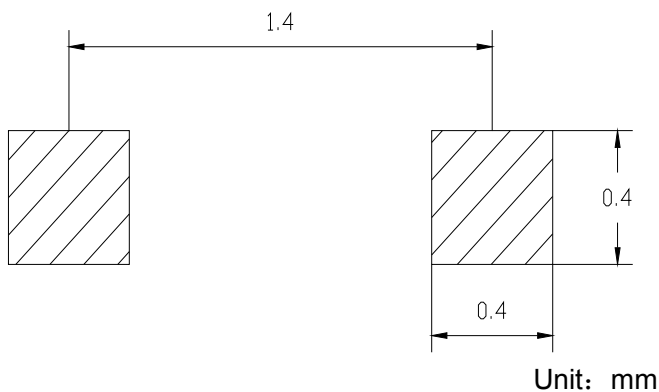
1N4448WT

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
1N4448WT	SOD-523	3000/Tape&Reel