



FEATURES

- Average Rectified Forward Current: $I_{F(AV)}=150\text{ mA}$
- Power Dissipation of 200mw



SOD-323

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N4448WS	SOD-323	T5	3000



MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	80	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current (at $t = 1\ \mu\text{s}$)	I_{FSM}	0.5	A
Power Dissipation	P_d	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 65 to + 150	°C

ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$, $T_J = 150\text{ °C}$ at $V_R = 25\text{ V}$, $T_J = 150\text{ °C}$	I_R	- - - -	100 25 50 30	nA nA μA μA
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{tr} = 0.1 \times I_R$, $R_L = 100\ \Omega$	t_{rr}	-	4	ns



Typical Characteristics

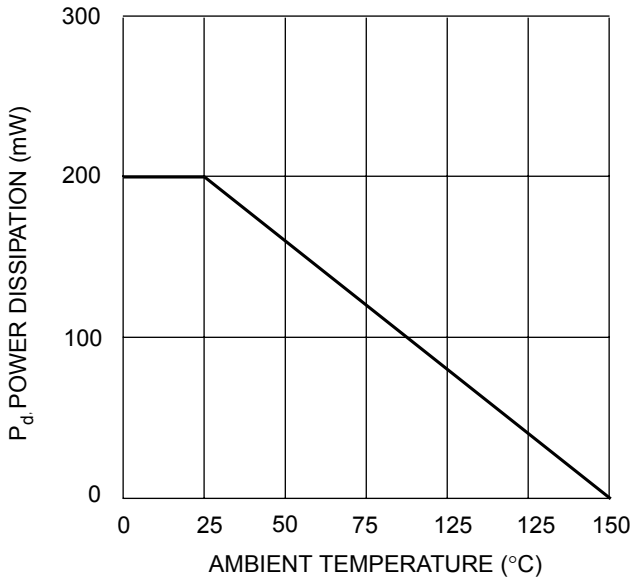


Fig. 1 Forward Current Derating Curve

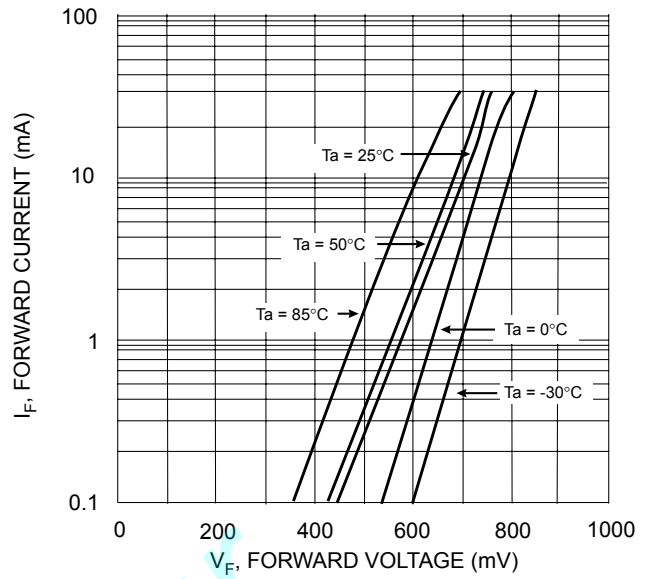


Fig. 2 Typical Forward Characteristics

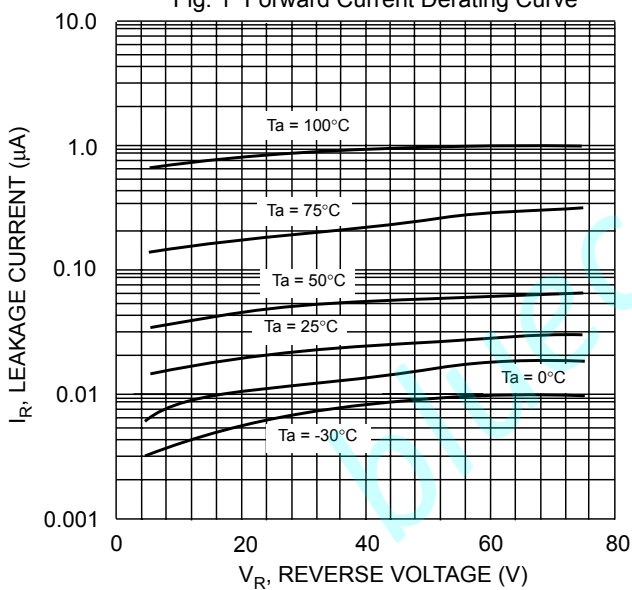


Fig. 3 Typical Reverse Characteristics

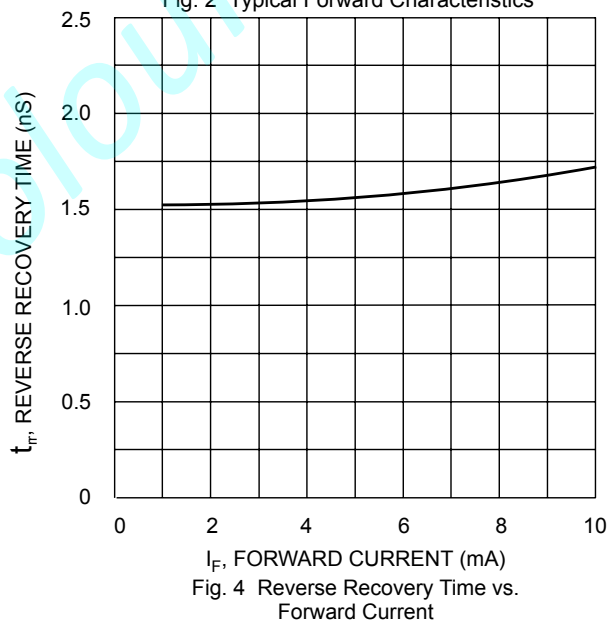


Fig. 4 Reverse Recovery Time vs. Forward Current

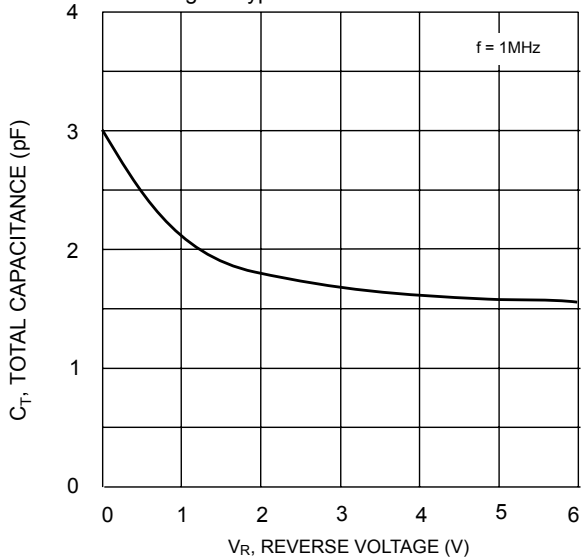
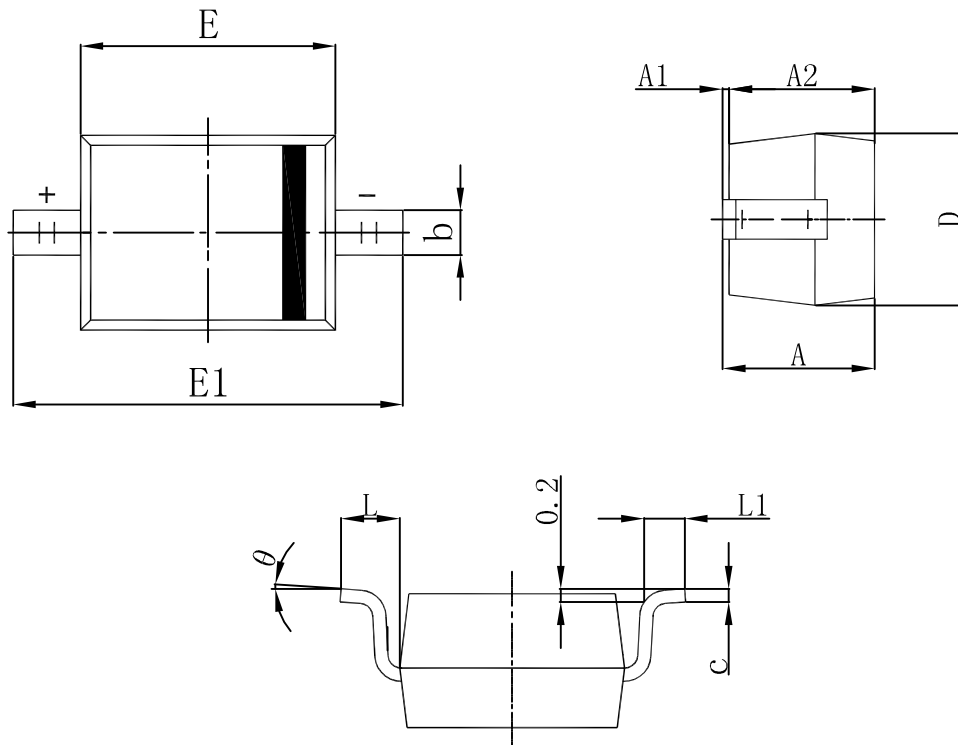


Fig. 5 Total Capacitance vs. Reverse Voltage



SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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