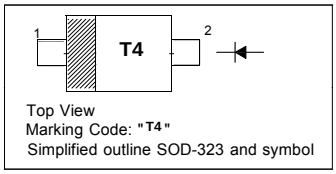
1N4448WS Silicon Epitaxial Planar Switching Diode

Fast Switching Diode

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "T4"
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

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 μs)	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

Characteristics at T_a = 25 °C

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

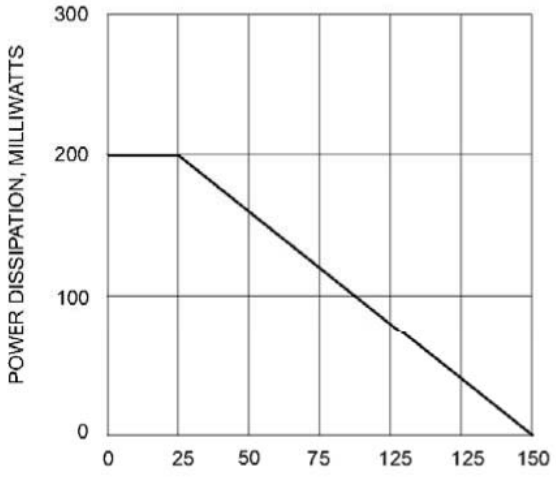


Fig. 1 Forward Current Derating Curve

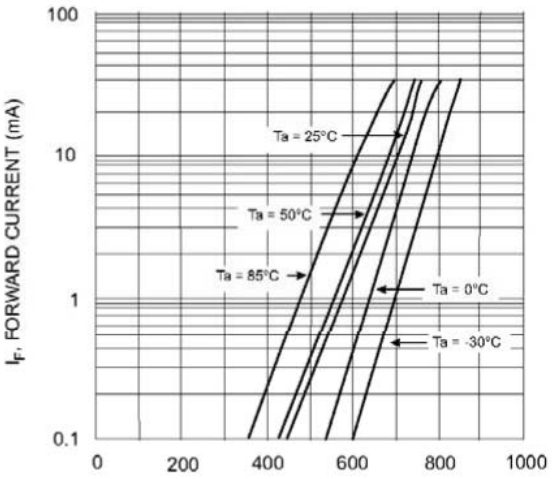


Fig. 2 Typical Forward Characteristics

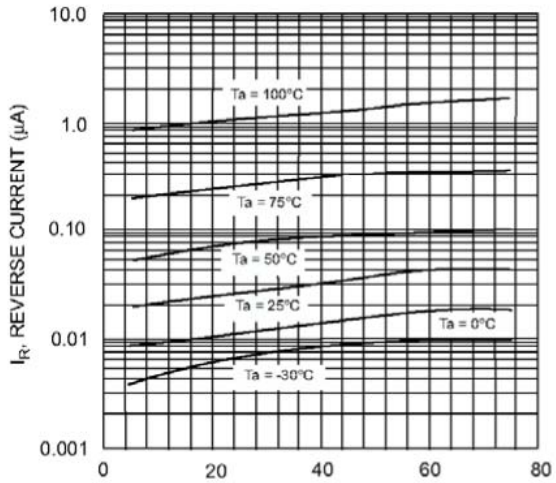


Fig. 3 Typical Reverse Characteristics

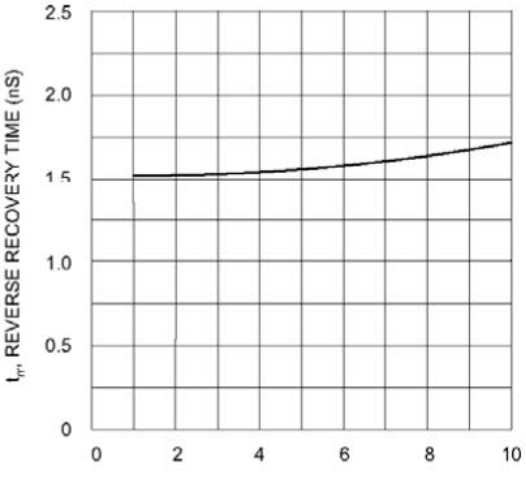
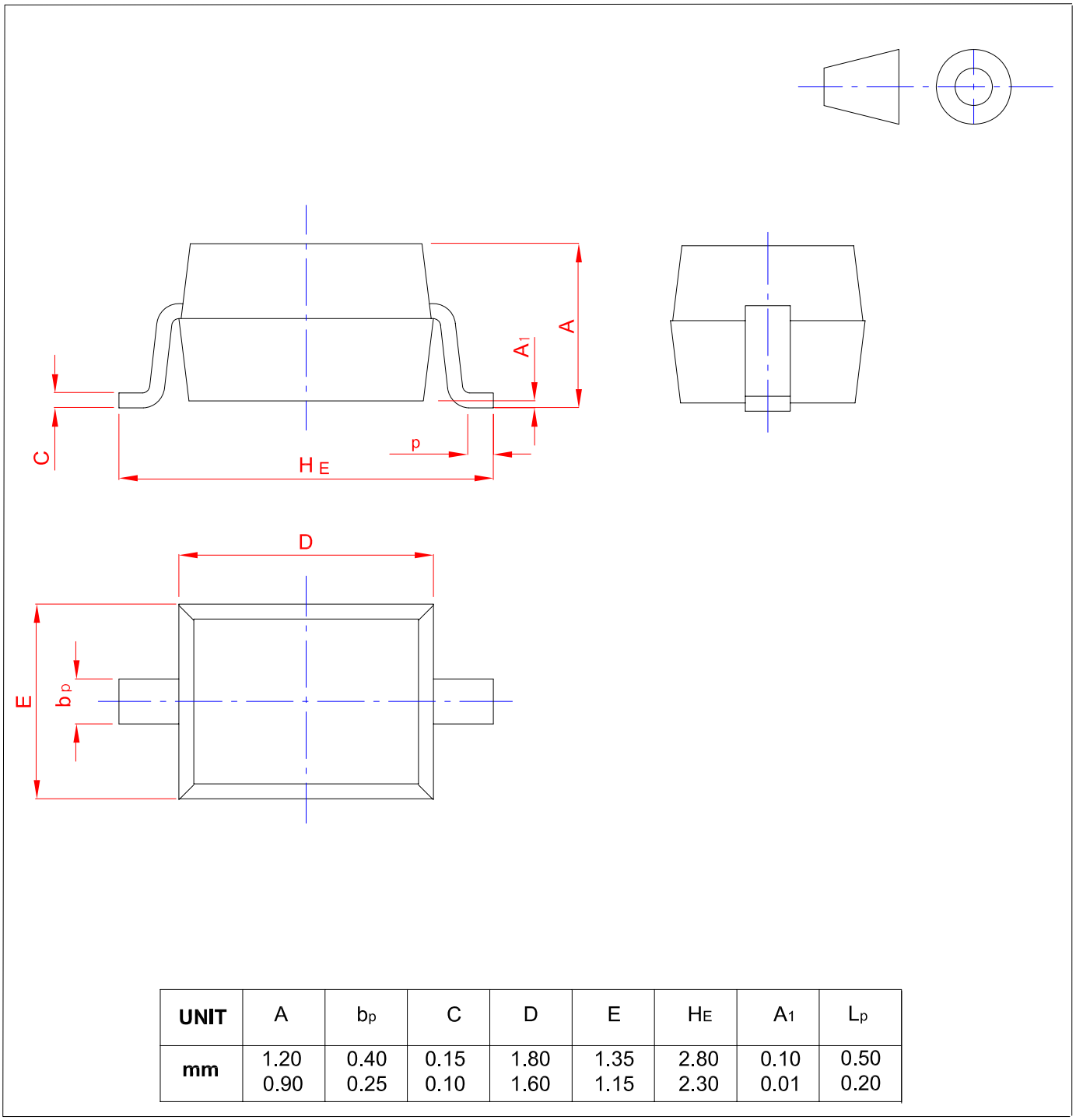


Fig. 4 Reverse Recovery Time vs. Forward Current

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E	A_1	L_p
mm	1.20 0.90	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30	0.10 0.01	0.50 0.20