

1N3004W Silicon Epitaxial Planar Diode

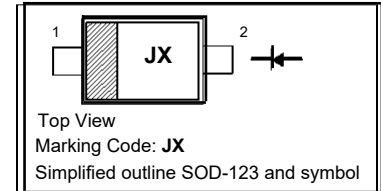
High Voltage Switching Diode

Features

- Fast switching speed
- High Conductance
- High Reverse Breakdown Voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



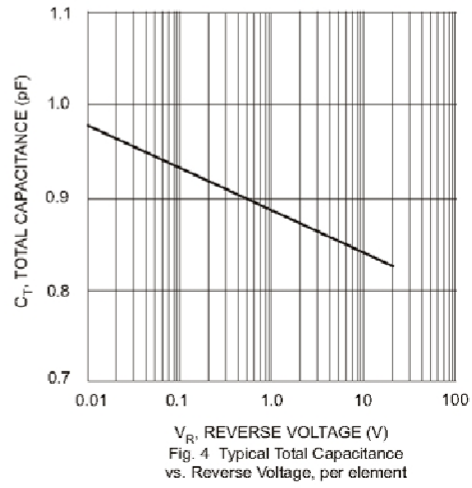
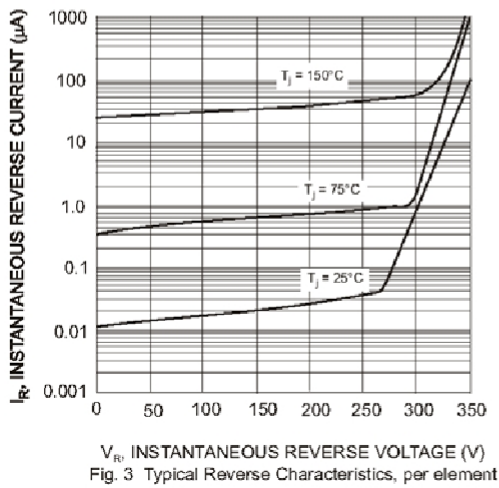
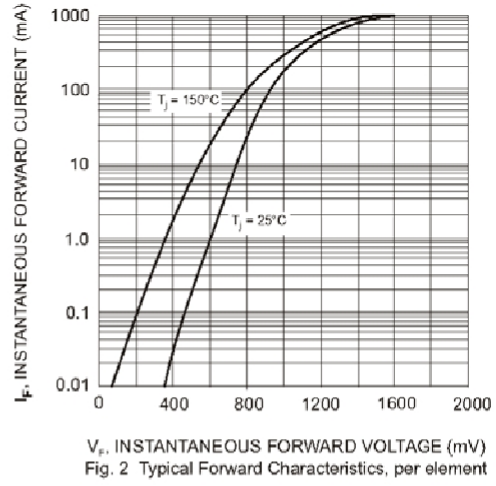
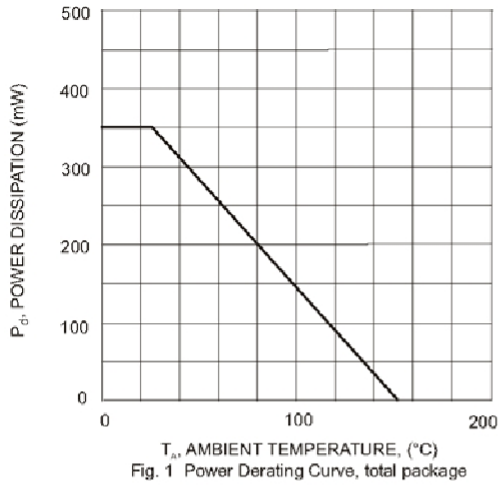
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	350	V
Working Peak Reverse Voltage	V_{RWM}	300	V
Reverse Voltage	V_R	300	V
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4	A
		1	
Power Dissipation	P_d	350	mW
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	-	0.87	V
		-	1	
		-	1.25	
Reverse Current at $V_R = 240\text{ V}$ at $V_R = 240\text{ V}, T_j = 150^\circ\text{C}$	I_R	-	100	nA
		-	100	μA
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	300	-	V
Total Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}, i_{rr} = 0.1 I_R, R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns

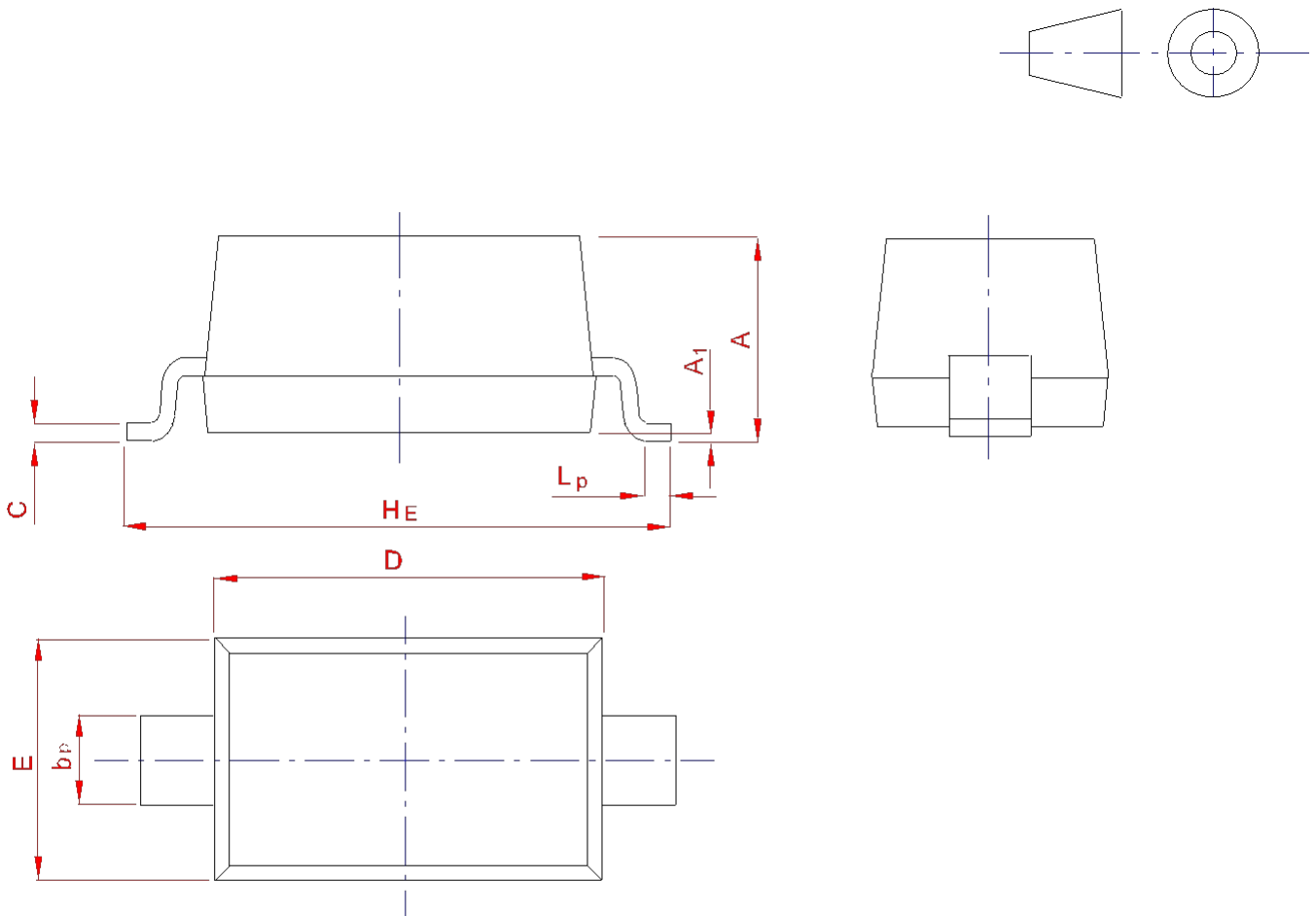
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20	0.60	0.135	2.75	1.65	3.85	0.10	0.50
	0.90	0.50	0.100	2.55	1.55	3.55	0.01	0.20