

## Silicon Epitaxial Planar Switching Diode

### Features

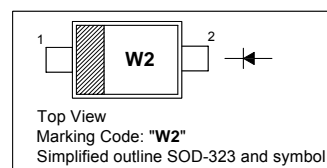
- High-speed
- High reliability

### Applications

- Ultra high speed switching

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



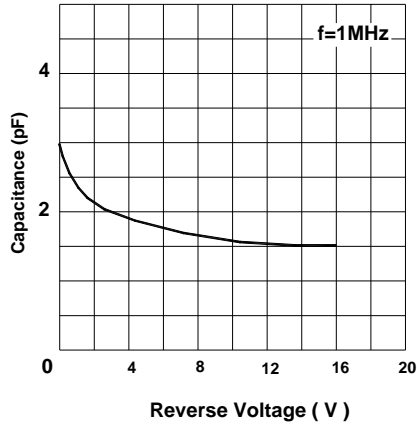
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	80	V
Reverse Voltage	$V_R$	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	$I_{FM}$	300	mA
Surge Current (1 $\mu\text{s}$ )	$I_{surge}$	4	A
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

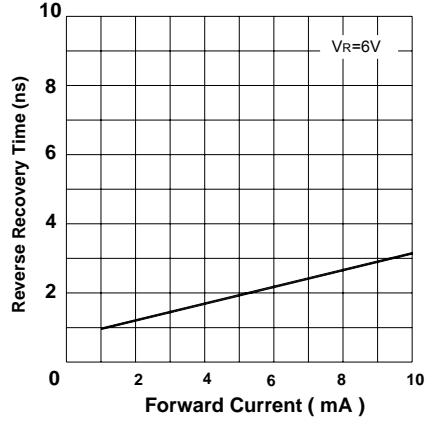
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.2	V
Reverse Current at $V_R = 70\text{ V}$	$I_R$	0.1	$\mu\text{A}$
Diode Capacitance at $V_R = 6\text{ V}$ , $f = 1\text{ MHz}$	$C_d$	3.5	pF
Reverse Recovery Time at $I_F = 5\text{ mA}$ , $V_R = 6\text{ V}$	$t_{rr}$	4	ns

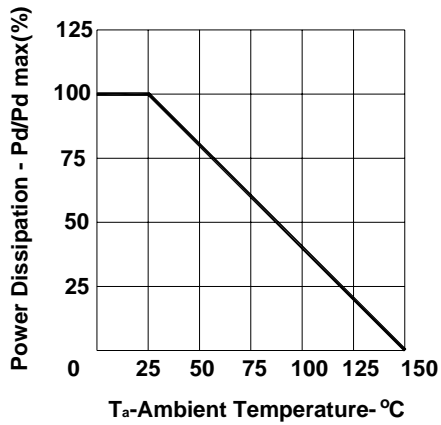
Capacitance



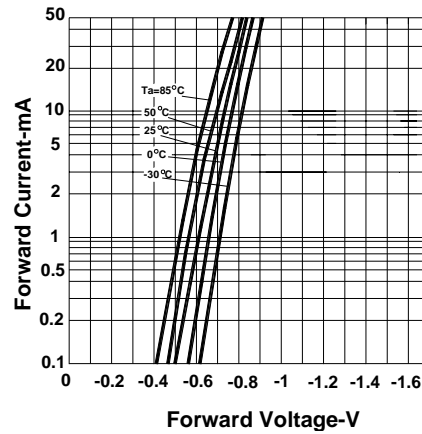
Reverse Recovery Time



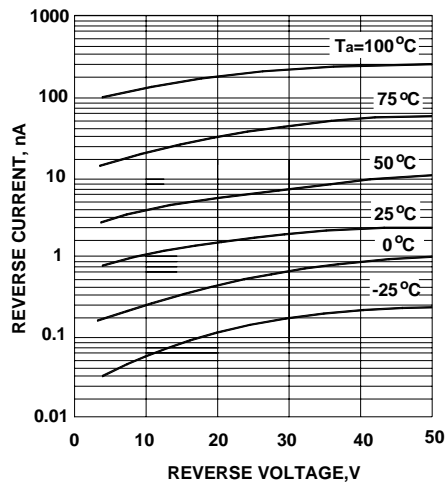
Power Attenuation Curve



Forward Characteristics



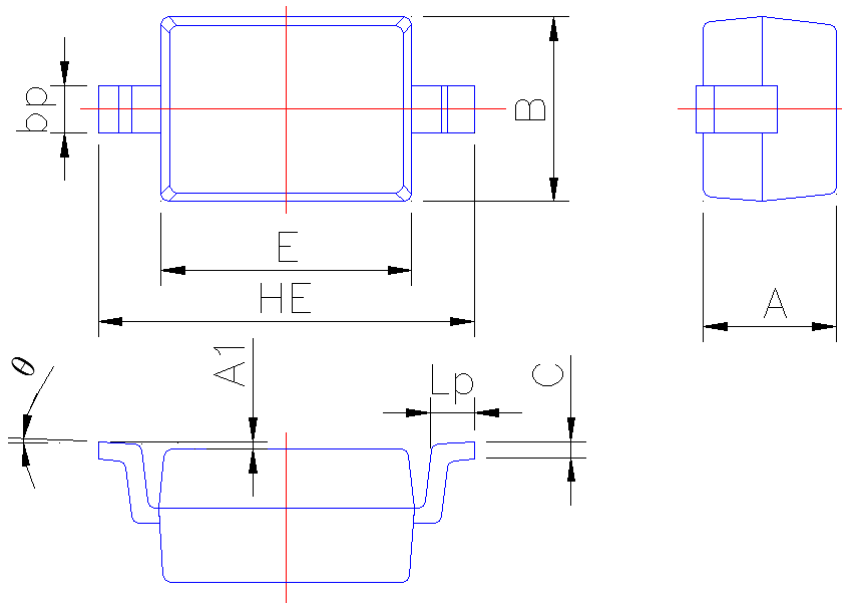
REVERSE CHARACTERISTICS



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.40
C	0.09	0.150
E	1.60	1.80
HE	2.30	2.70
Lp	0.20	0.40
$\theta$	0°	5°