

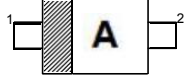
## Silicon Epitaxial Planar Switching

### Features

- Small plastic package suitable for surface mounted design
- High reliability with high surge current handling capability

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View  
Marking Code: "A"  
Simplified outline SOD-523 and symbol

### Applications

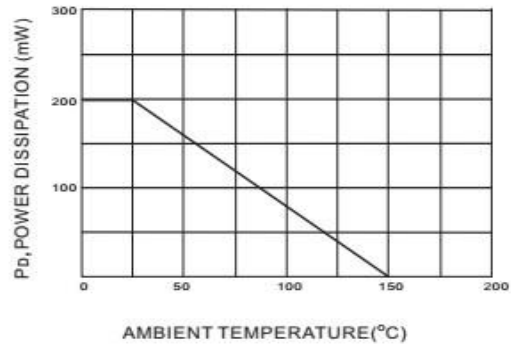
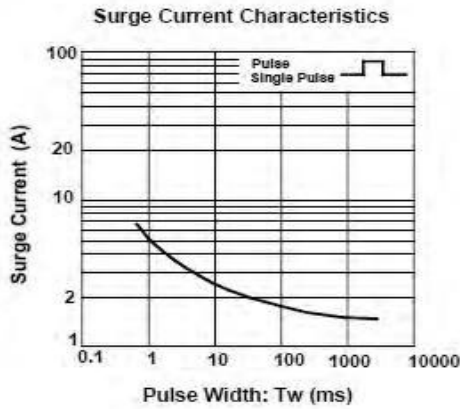
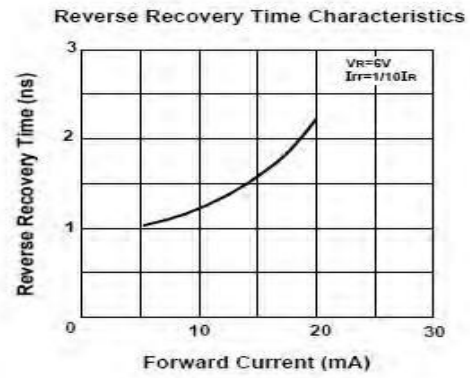
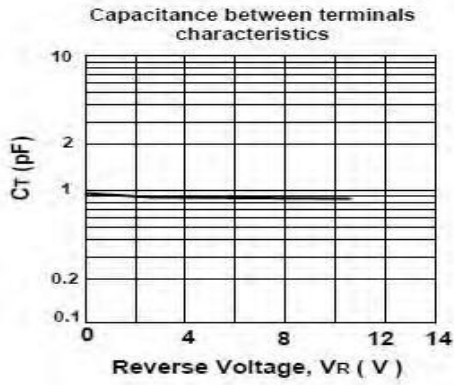
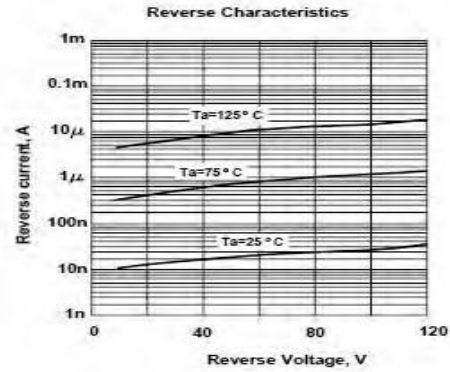
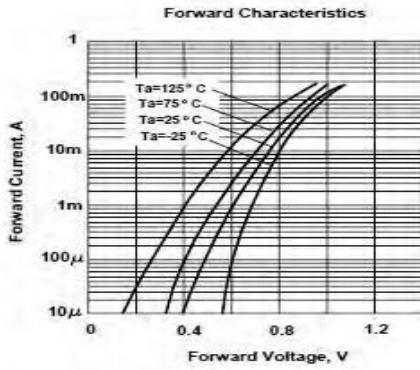
- High speed switching

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

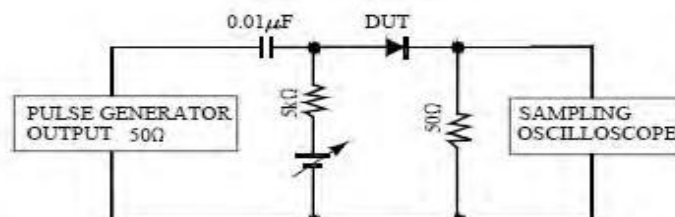
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	90	V
Reverse Voltage	$V_R$	80	V
Average Rectified Forward Current	$I_{F(AV)}$	100	mA
Peak Forward Current	$I_{FM}$	225	mA
Surge Forward Current (1 s)	$I_{FSM}$	500	mA
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

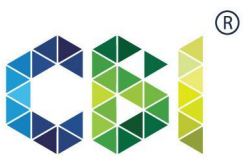
### Electrical Characteristics ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	1.2	V
Reverse Current at $V_R = 80\text{ V}$	$I_R$	0.1	$\mu\text{A}$
Capacitance between Terminals at $V_R = 0.5\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	3	pF
Reverse Recovery Time at $V_R = 6\text{ V}$ , $I_F = 10\text{ mA}$ , $R_L = 100\ \Omega$	$t_{rr}$	4	ns



Reverse Recovery Time Measurement Circuit

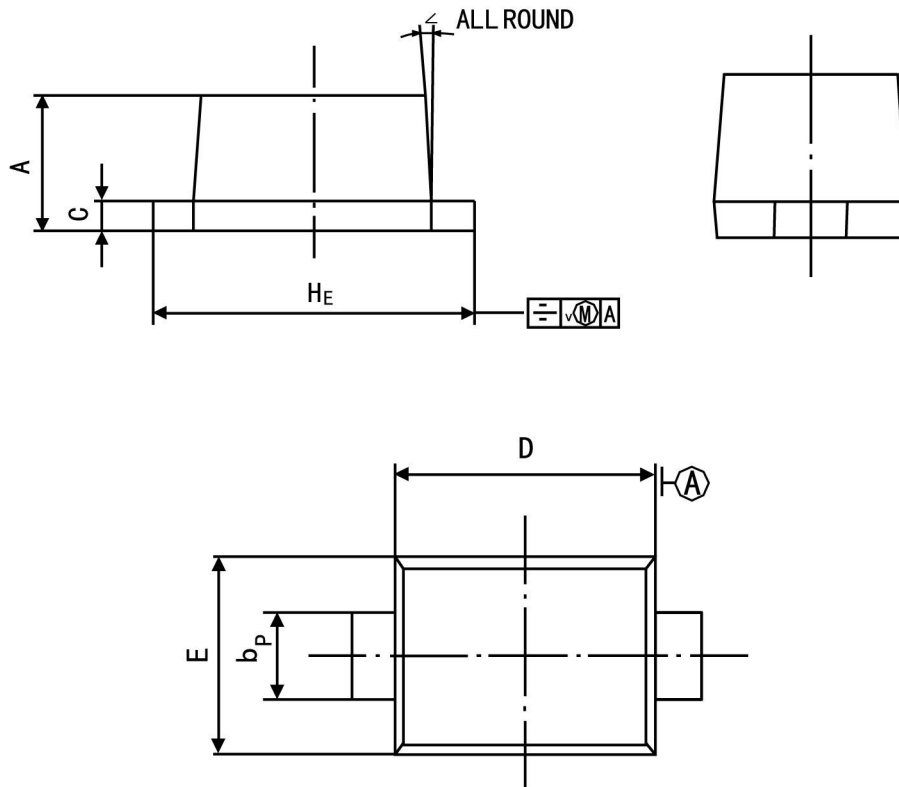




## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.70
bp	0.30	0.40
C	0.100	0.14
D	1.15	1.25
E	0.75	0.85
HE	1.50	1.70
V	—	0.10
∠	—	5°