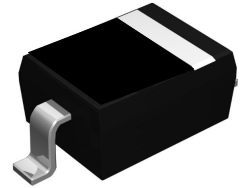


## Features

- Fast switching speed
- High reliability
- High surge current handling capability



Schematic Diagram



SOD-323

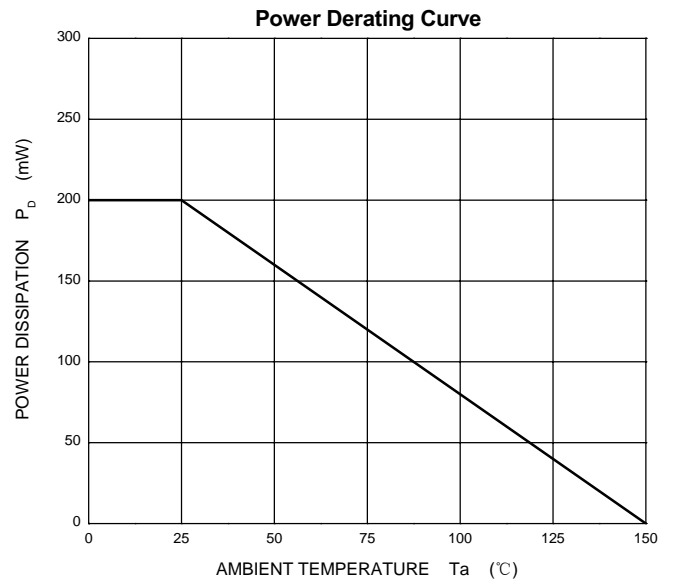
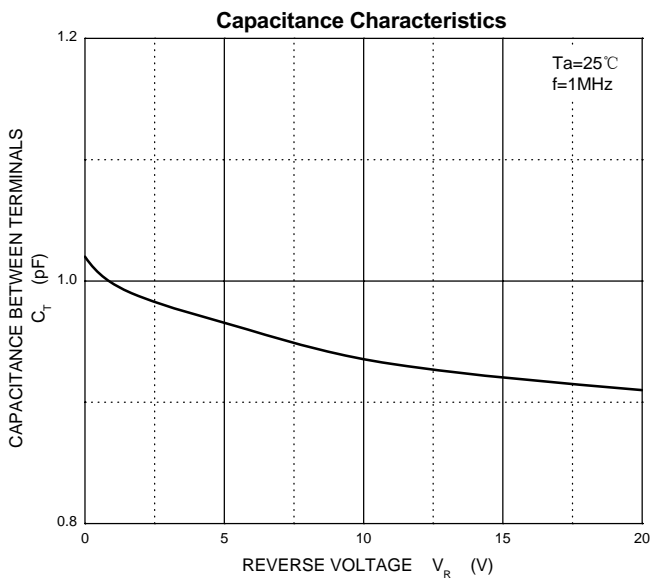
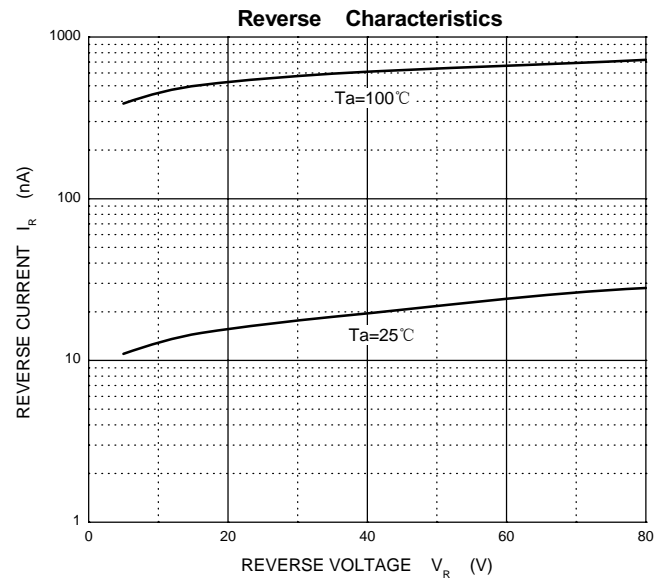
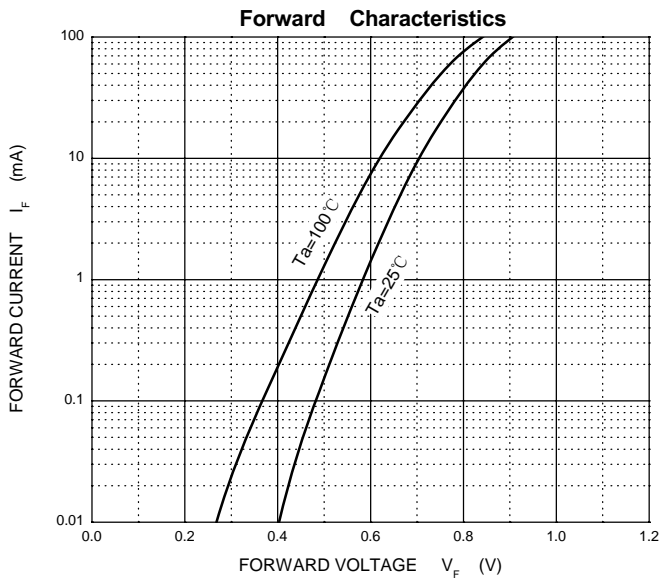
## Absolute Maximum Ratings (Single Diode, $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	90	V
DC Blocking Voltage	$V_R$	80	V
Peak Forward Current	$I_{FM}$	225	mA
Average Rectified Output Current	$I_O$	100	mA
Average Rectifier Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	2.0	A
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^{\circ}\text{C}/\text{W}$
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$

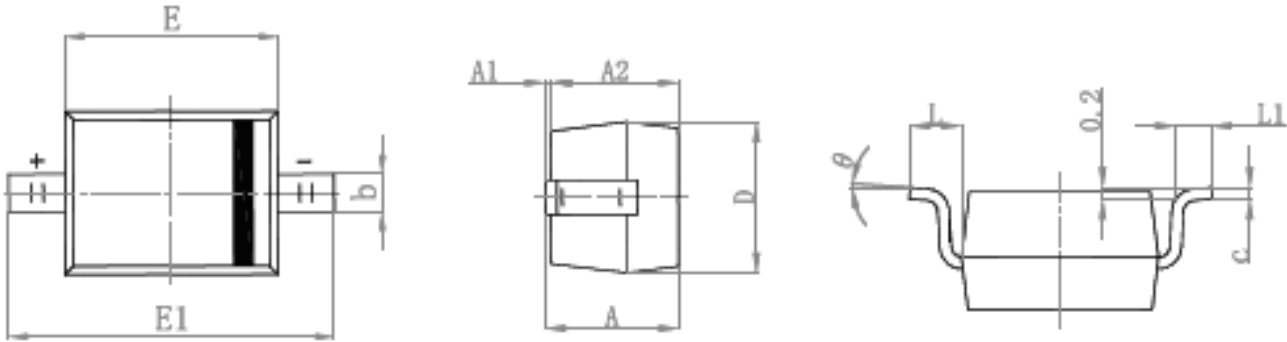
## Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

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

## Typical Electrical Characteristic Curves

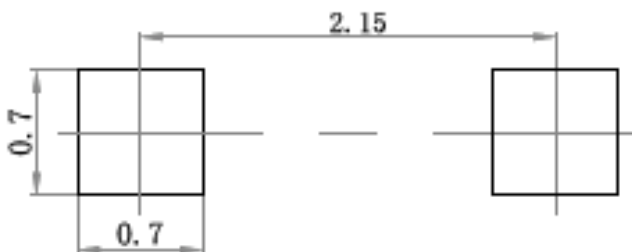


**Package Outline Dimensions SOD-323**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
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	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

**Suggested Pad Layout**



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.