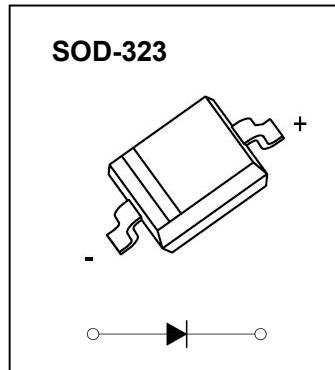


## SOD- 3 23Plastic-Encapsulate Diodes

### FEATURES

- ⌘ Fast Switching Speed
- ⌘ Surface Mount Package Ideally Suited for Automatic Insertion
- ⌘ For General Purpose Switching Applications
- ⌘ High Conductance

**MARKING: T4**



### Maximum Ratings and Electrical Characteristics, Single Diode @ $T_a=25^\circ\text{C}$

Parameter	Symbol	Limit	Unit
<b>Non-Repetitive Peak Reverse Voltage</b>	$V_{RM}$	100	V
<b>Peak Repetitive Peak Reverse Voltage</b>	$V_{RRM}$		
<b>Working Peak Reverse Voltage</b>	$V_{RWM}$	100	V
<b>DC Blocking Voltage</b>	$V_R$		
<b>RMS Reverse Voltage</b>	$V_{R(RMS)}$	71	V
<b>Forward Continuous Current</b>	$I_{FM}$	300	mA
<b>Average Rectified Output Current</b>	$I_O$	150	mA
<b>Non-Repetitive Peak Forward Surge Current @<math>t=8.3\text{ms}</math></b>	$I_{FSM}$	2.0	A
<b>Power Dissipation</b>	$P_d$	200	mW
<b>Thermal Resistance from Junction to Ambient</b>	$R_{\theta JA}$	625	°C/W
<b>Junction Temperature</b>	$T_j$	150	°C
<b>Storage Temperature</b>	$T_{STG}$	-55~+150	°C

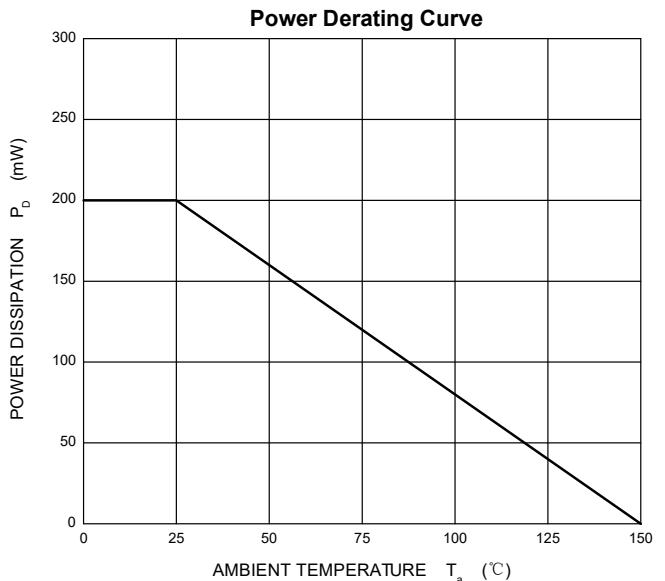
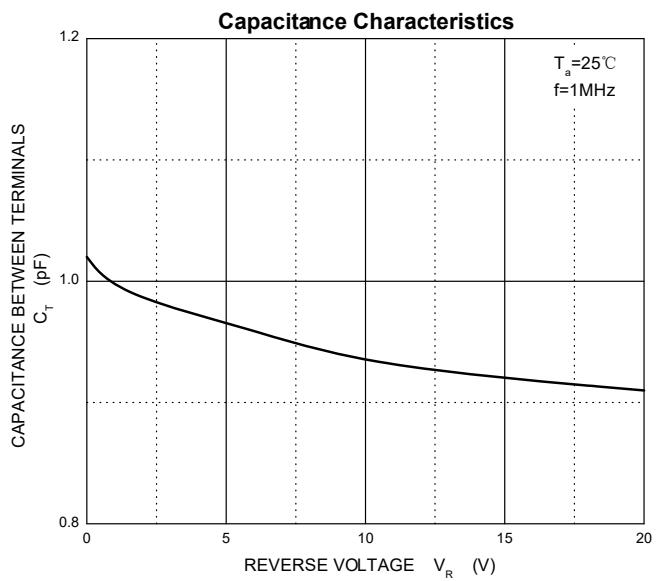
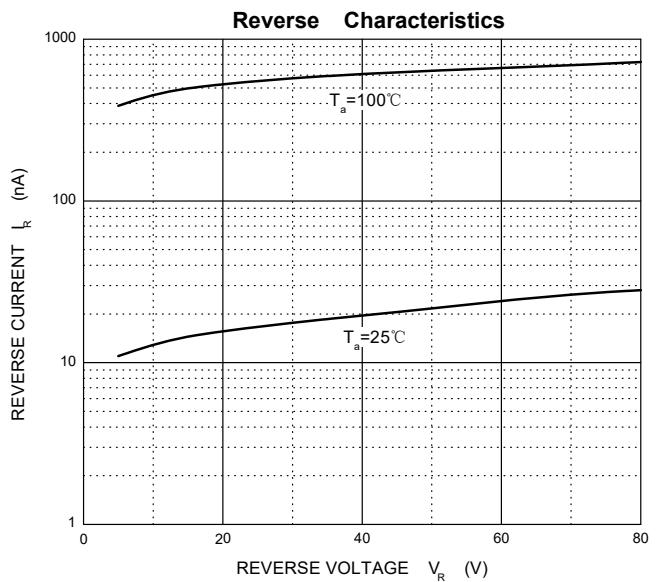
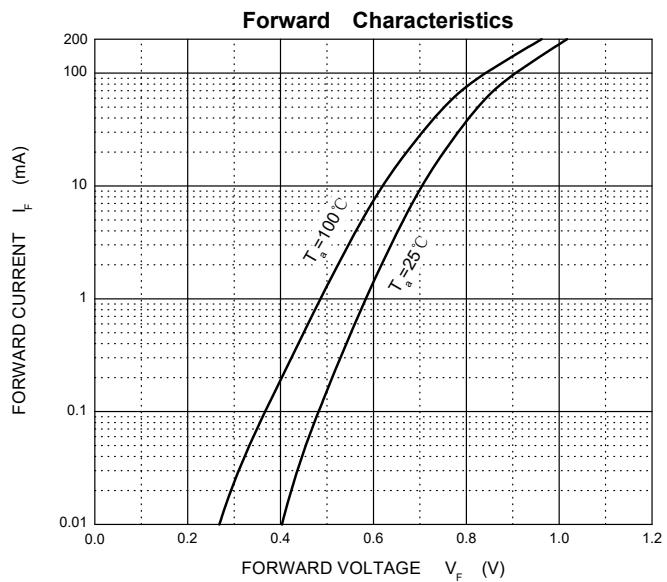
**ELECTRICAL CHARACTERISTICS**

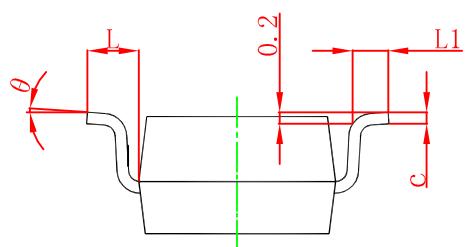
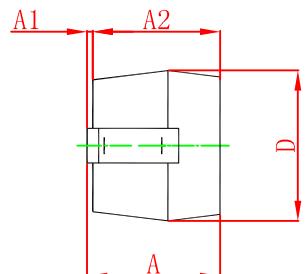
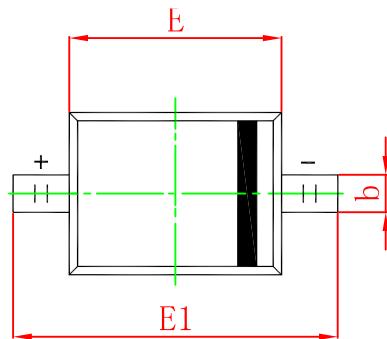
Electrical Ratings @Ta=25°C

FAST SWITCHING DIODE

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
<b>Forward voltage</b>	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
<b>Reverse current</b>	I <sub>R1</sub>			1	µA	V <sub>R</sub> =75V
	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
<b>Capacitance between terminals</b>	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V,f=1MHz
<b>Reverse recovery time</b>	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1XI <sub>R</sub> ,R <sub>L</sub> =100Ω

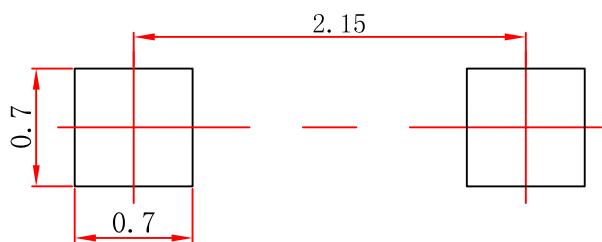
## Typical Characteristics





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
$\theta$	0°	8°	0°	8°

### SOD-323 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.