



## Features

- Low Forward Voltage Drop
- Negligible Reverse Recovery Time



SOD-323



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N4007WS	SOD-323	7A	3000

## Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	1000	V
Reverse Voltage	$V_R$	700	V
Average Rectified Forward Current	$I_{F(AV)}$	1	A
Surge Forward Current ( $t < 1$ s, $T_j = 25^\circ\text{C}$ )	$I_{FSM}$	15	A
Thermal Resistance from Junction to Ambient Air	$R_{\theta JA}$	55	$^\circ\text{C/W}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

## Electrical Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1$ mA at $I_F = 1$ A	$V_F$	- -	0.715 1	V
Maximum DC Reverse Current at $T_a = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_a = 125^\circ\text{C}$	$I_R$	- -	5 50	$\mu\text{A}$ $\mu\text{A}$
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	$C_J$	-	2	pF
Typical junction capacitance	$t_{rr}$	-	1.8	$\mu\text{s}$



## Typical Characteristics

Fig.1 Forward Current Derating Curve

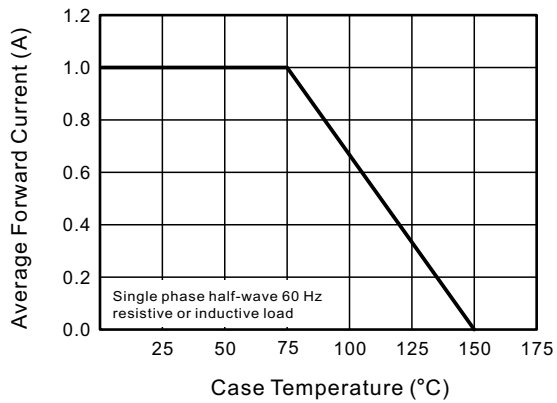


Fig.2 Typical Instantaneous Reverse Characteristics

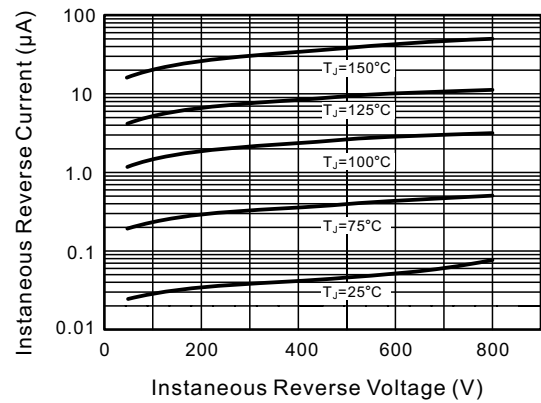


Fig.3 Typical Forward Characteristic

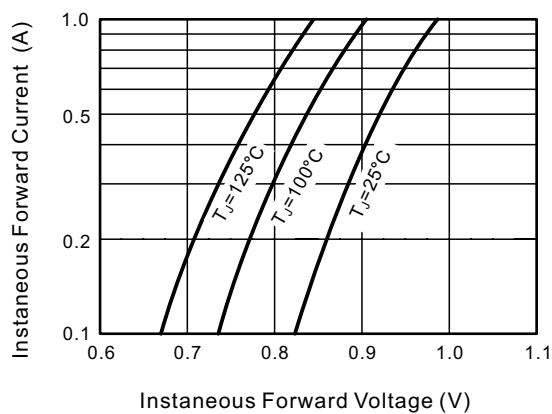


Fig.4 Typical Junction Capacitance

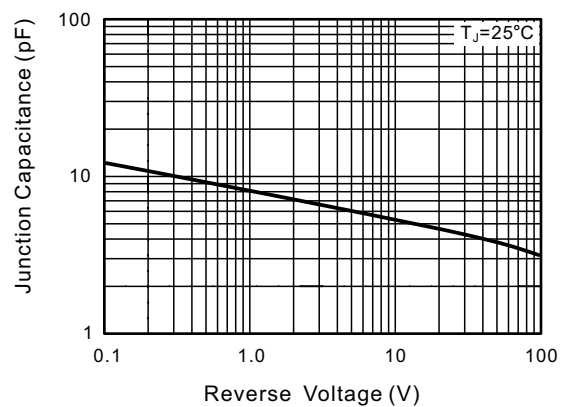
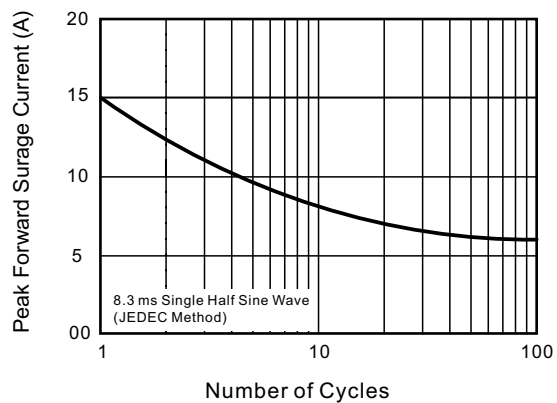
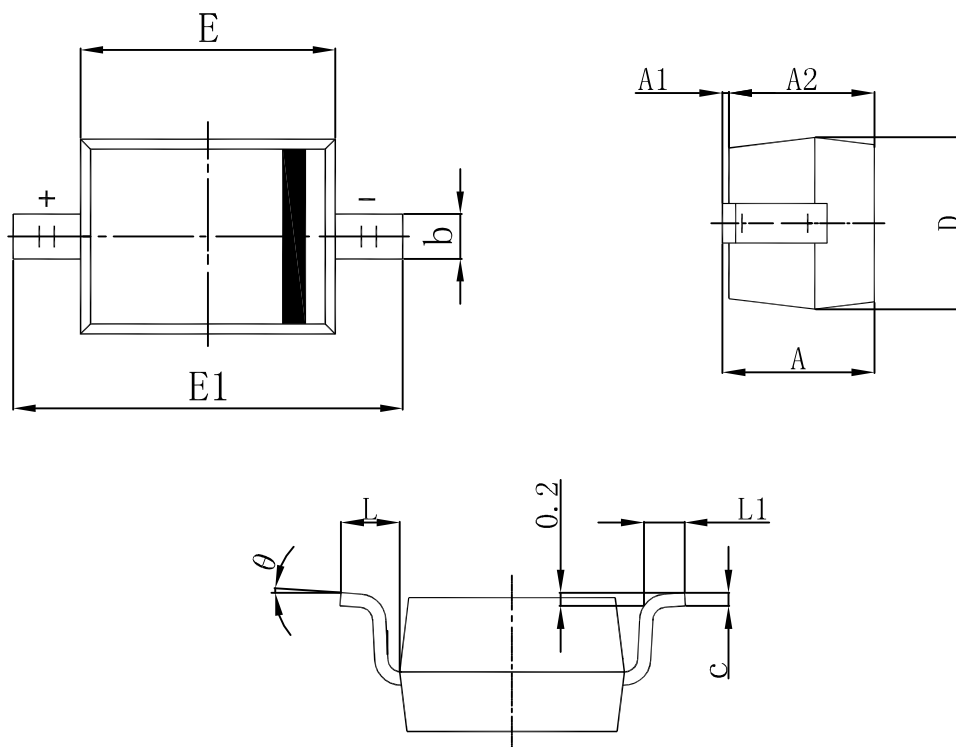


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





## SOD-323 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A		1.100		0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
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	2.500	2.750	0.098	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°



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