



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°C)	I _{FSM}	15	A
Thermal Resistance from Junction to Ambient Air	R _{θJA}	55	°C/W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I _F = 1 mA at I _F = 1A	V _F	-	0.715 1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	-	5 50	µA µA
Total Capacitance at V _R = 0 V, f = 1 MHz	C _J	-	2	pF
Typical junction capacitance	t _{rr}	-	1.8	uS



Typical Characteristics

Fig.1 Forward Current Derating Curve

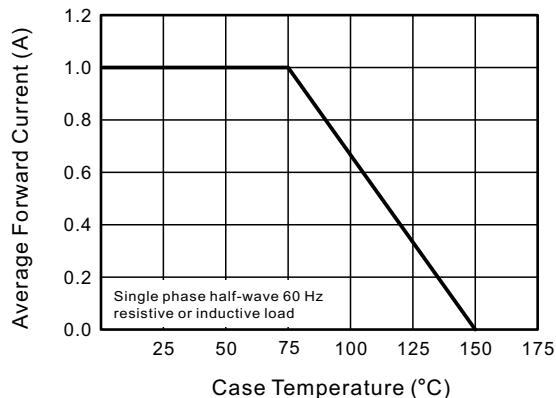


Fig.2 Typical Instantaneous Reverse Characteristics

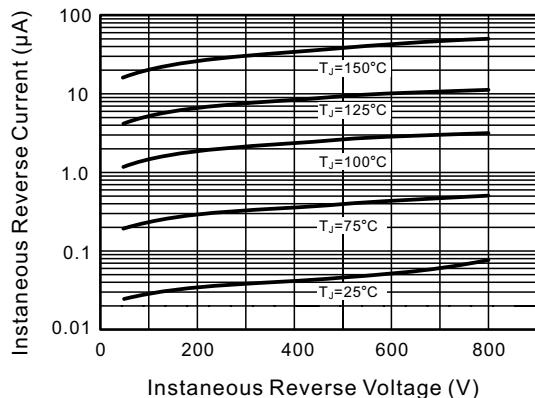


Fig.3 Typical Forward Characteristic

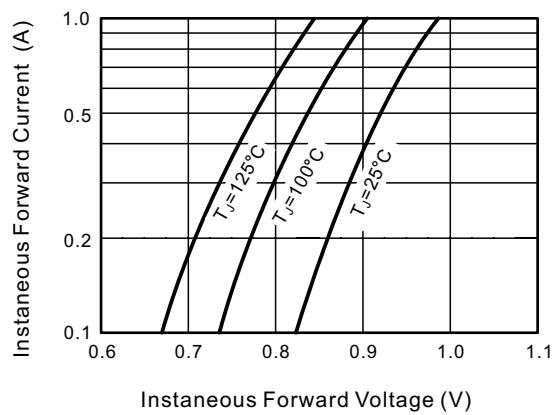


Fig.4 Typical Junction Capacitance

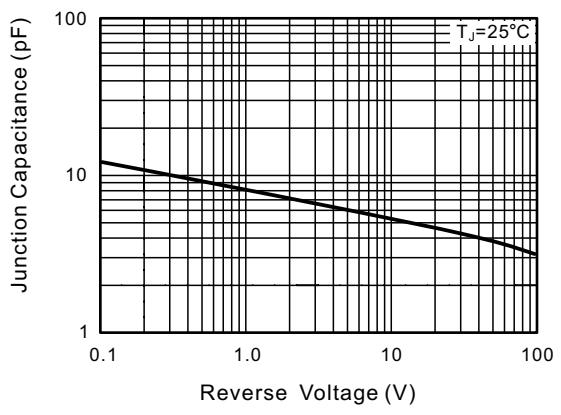
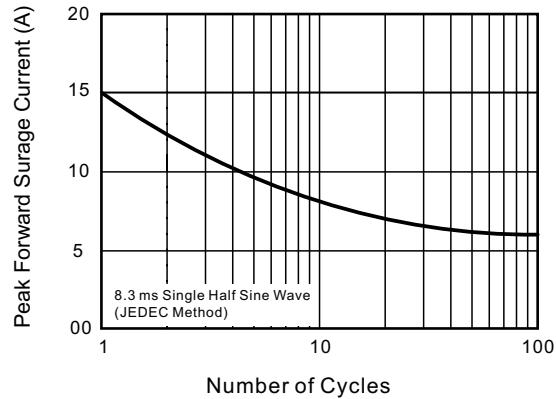
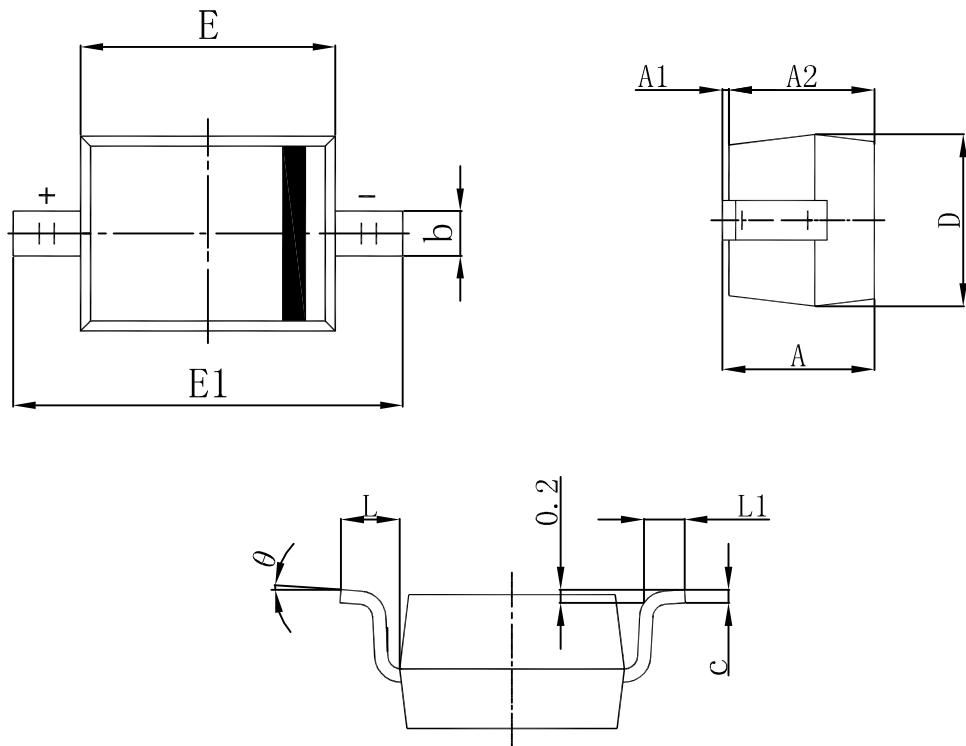


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





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
theta	0°	8°	0°	8°



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