

FEATURES

- Very Small Plastic Package
- High Switching Speed

SOD-323



MARKING: XX

APPLICATIONS

High-Speed Switching in e.g. Surface Mounted Circuits

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

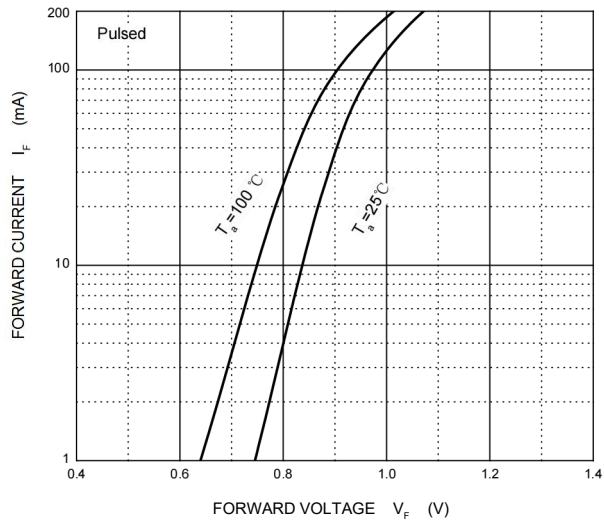
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	130	V
V_R	DC Blocking Voltage	130	
I_o	Continuous Forward Current	215	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2.0	A
P_D	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

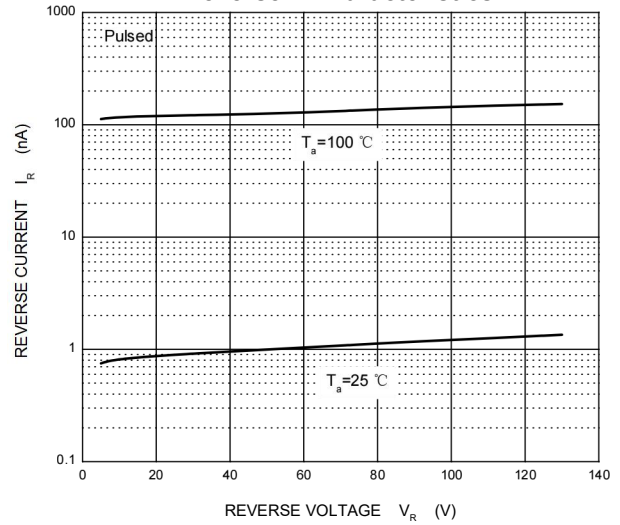
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	130				$I_R=100\mu\text{A}$
Forward voltage	V_{F1}			0.85	V	$I_F=1\text{mA}$
	V_{F2}			0.95	V	$I_F=10\text{mA}$
	V_{F3}			1	V	$I_F=50\text{mA}$
	V_{F4}			1.1	V	$I_F=150\text{mA}$
Reverse current	I_R			5	nA	$V_R=75\text{V}$
Diode capacitance	C_{tot}		2		pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			3	μs	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R$, $R_L=100\Omega$

Typical Characteristics

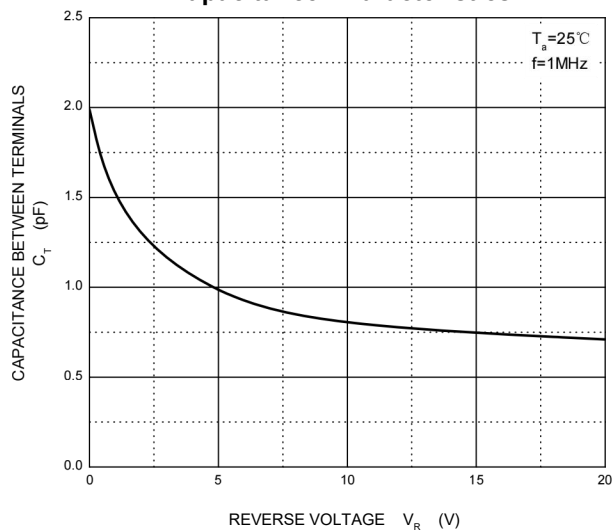
Forward Characteristics



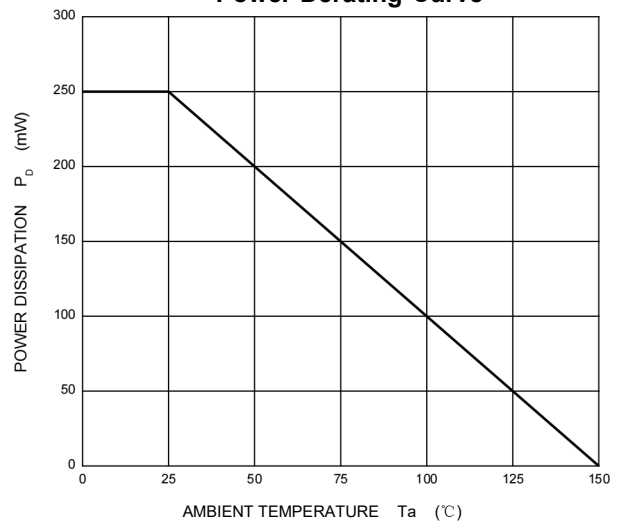
Reverse Characteristics



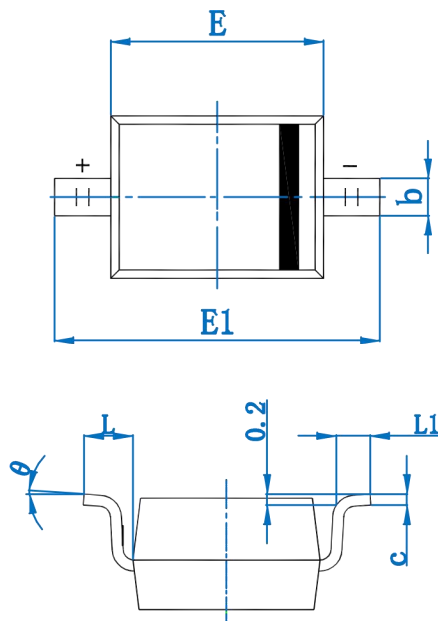
Capacitance Characteristics



Power Derating Curve

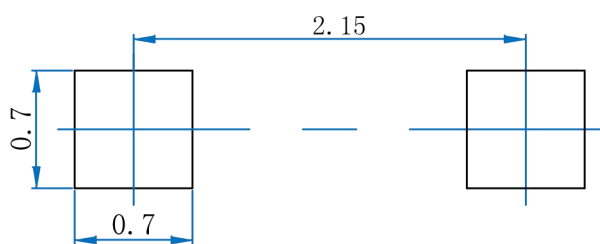


SOD-323 Package Outline Dimensions



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°

SOD-323 Suggested Pad Layout



Note:

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