



## Features

- Peak Forward Current:  $I_{FM} = 1A$
- Power Dissipation of 250mW

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
CDBV120-HF	SOD-323	SJ	3000



SOD-323



## Maximum Ratings ( $T_a = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	20	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified Output Current	$I_O$	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	9	A
Repetitive Peak Forward Current	$I_{FRM}$	1.5	A
Power Dissipation	$P_D$	250	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C/W}$
Operation Junction temperature Range	$T_J$	-40~+125	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+150	$^\circ\text{C}$

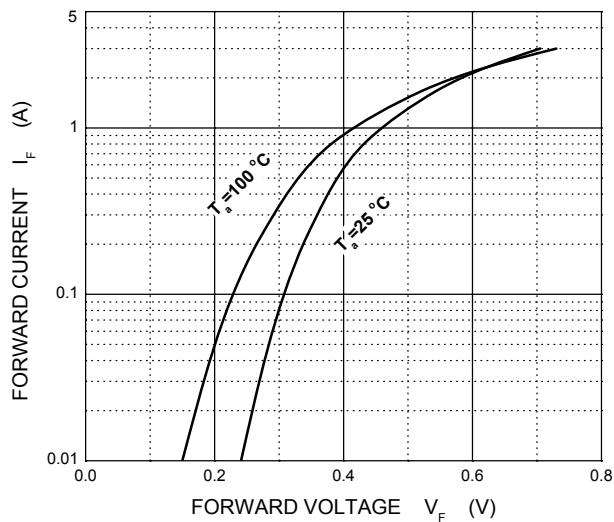
## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1\text{mA}$	20		V
Reverse voltage leakage current	$I_R$	$V_R = 20\text{V}$		1	mA
Forward voltage	$V_F$	$I_F = 1\text{A}$ $I_F = 3\text{A}$		0.45 0.75	V
Diode capacitance	$C_D$	$V_R = 4\text{V}$ , $f = 1\text{MHz}$		120	pF

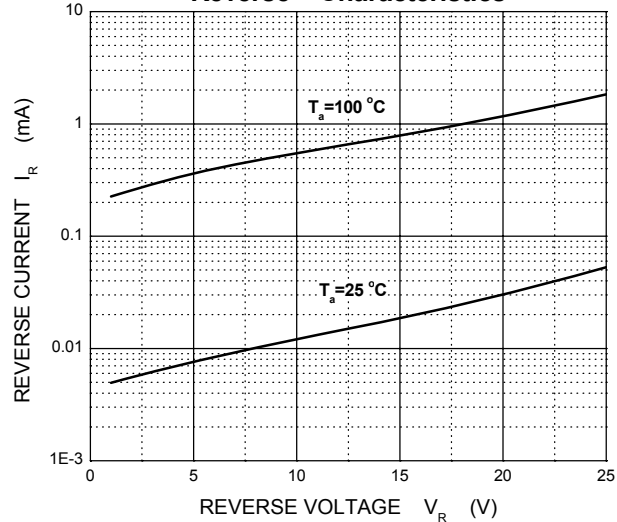


## Typical Characteristics

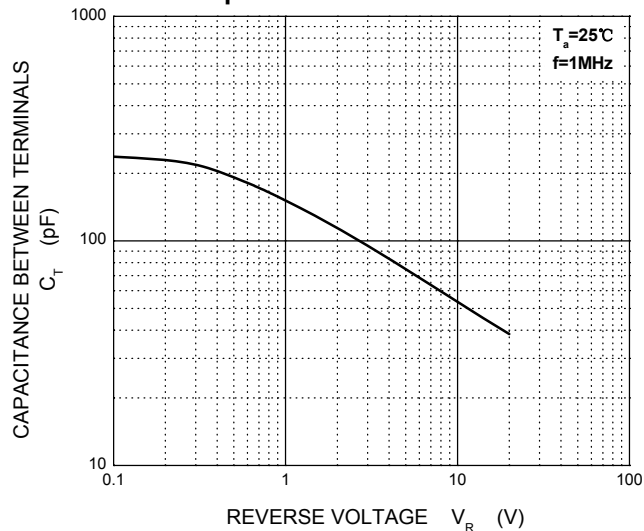
Forward Characteristics



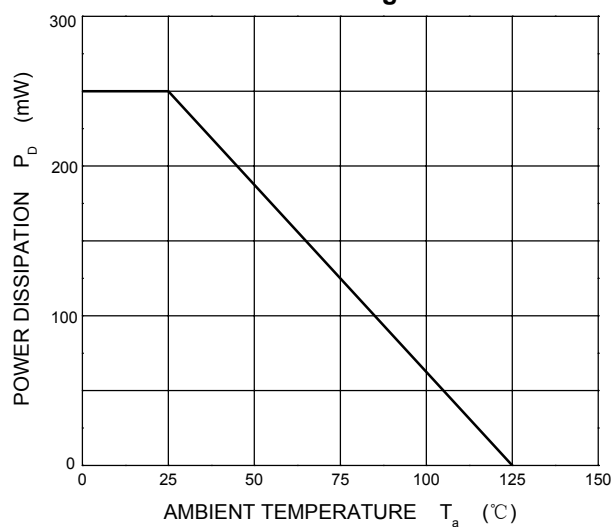
Reverse Characteristics



Capacitance Characteristics

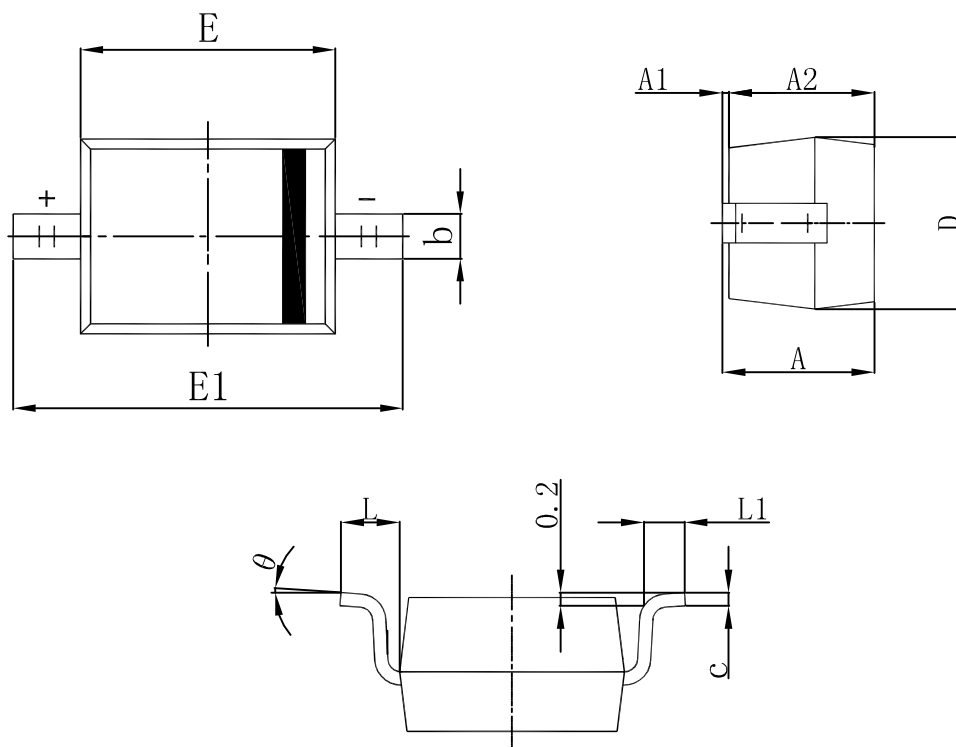


Power Derating Curve





## 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
$\theta$	0°	8°	0°	8°



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