

Features

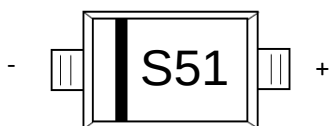
- Small surface mounting type
- High speed
- High reliability with high surge current handing capability



SOD-323 top view



Schematic diagram



Marking and pin assignment



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	20	V
V_{RM}	Peak reverse voltage	25	V
I_O	Average Rectified Output Current	300	mA
I_{FM}	Peak forward current	700	mA
P_D	Power dissipation	200	mW
$R_{\theta JA}$	Thermal resistance junction to ambient air	500	$^{\circ}\text{C/W}$
T_J	Operating Junction Temperature Range	-40~+125	$^{\circ}\text{C}$
T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

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

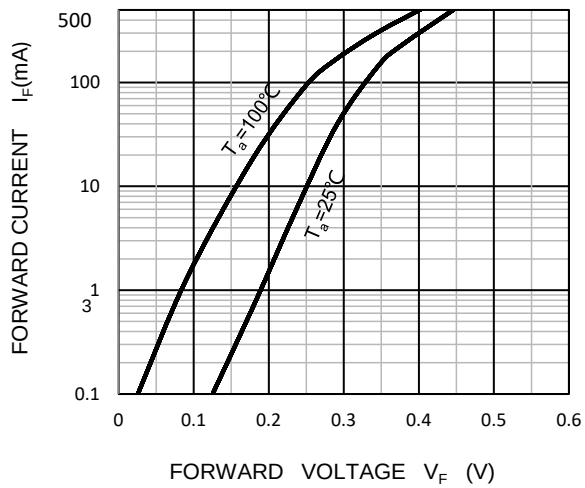
Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse voltage leakage current	$V_R=20\text{V}$	--	--	50	μA
V_F	Forward voltage	$I_F=1\text{mA}$	--	0.16	--	V
		$I_F=10\text{mA}$	--	0.22	--	
		$I_F=300\text{mA}$	--	0.38	0.45	
C_{tot}	Total capacitance	$V_R=0\text{V}, f=1\text{MHz}$	--	46	--	pF

Ordering Information (Example)

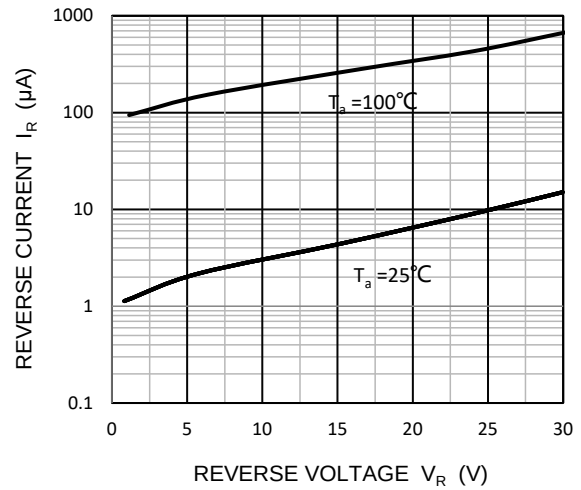
Type	Package	Marking	Minimum	Inner Box	Outer	Delivery
1SS404	SOD-323	S51	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

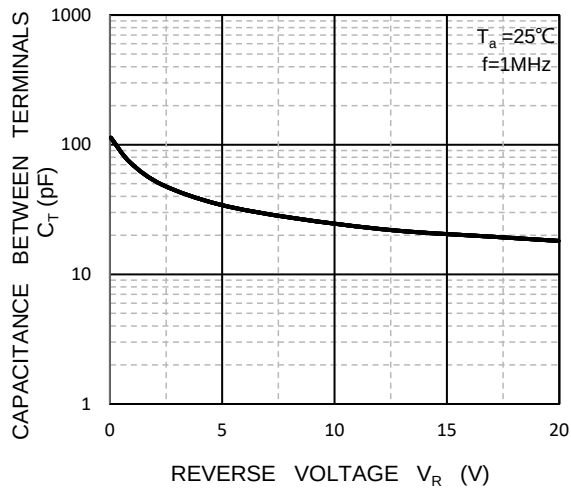
Forward Characteristics



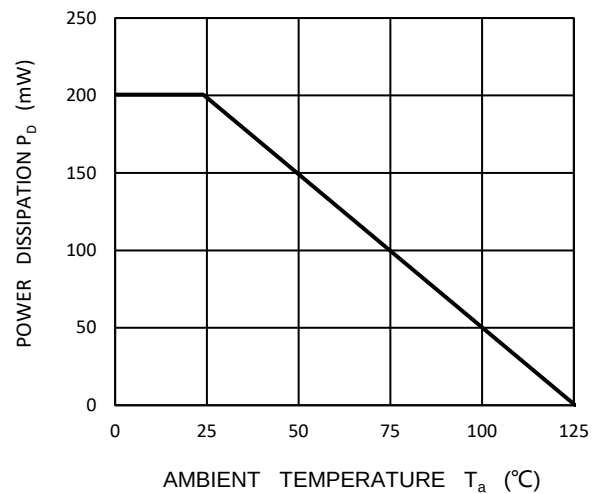
Reverse Characteristics



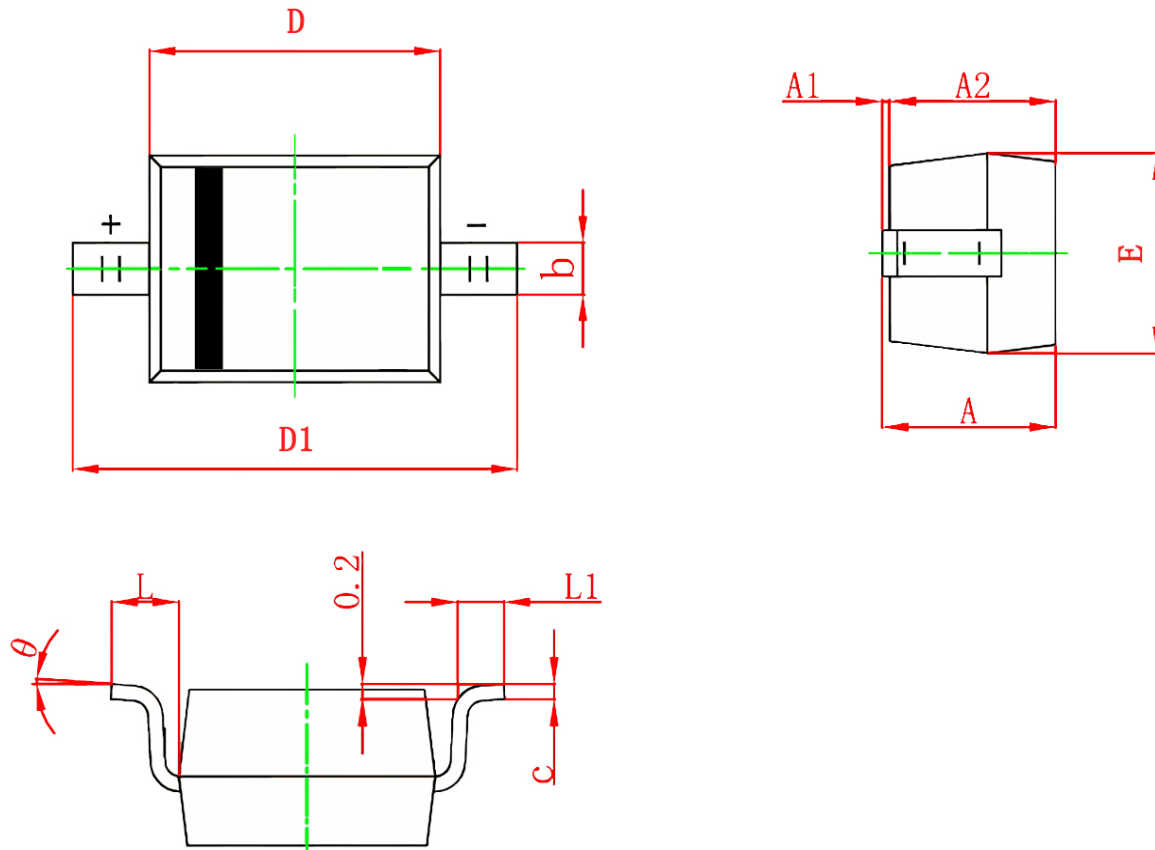
Capacitance Characteristics



Power Derating Curve



SOD-323 Package information



Symbol	Dimensions in Millimeters(mm)		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	1.600	1.800	0.063	0.071
D1	2.500	2.750	0.098	0.108
E	1.200	1.400	0.047	0.055
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°