

Features

- Low current rectifier schottky diode
- Low voltage, low inductance
- For power supply



SOD-323 top view



Schematic diagram



Marking and pin assignment



Pb-Free



Halogen-Free

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Symbol	Parameter	Value	Unit
V_R	Reverse Voltage	30	V
V_{RM}	Peak reverse voltage	30	V
I_O	Average Rectified Output Current	500	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	2	A
P_D	Power Dissipation	200	mW
R_{OJA}	Thermal Resistance From Junction To Ambient	500	°C/W
T_J	Operating Junction Temperature Range	-40~+125	°C
T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Electrical Ratings @Ta=25°C

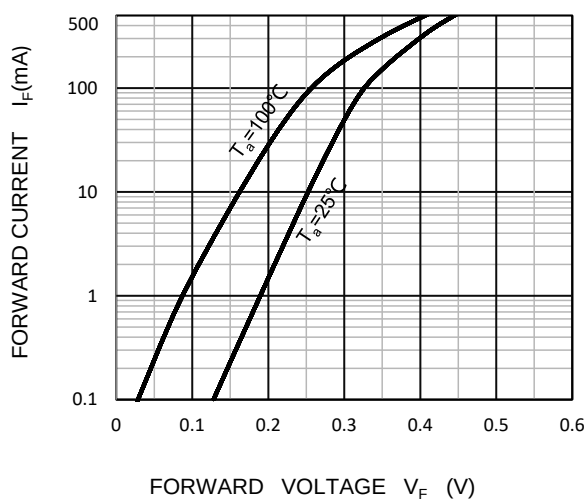
Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse voltage leakage current	$V_R=20V$	--	--	100	μA
V_F	Forward voltage	$I_F=100mA$	--	--	0.36	V
		$I_F=500mA$	--	--	0.47	

Ordering Information (Example)

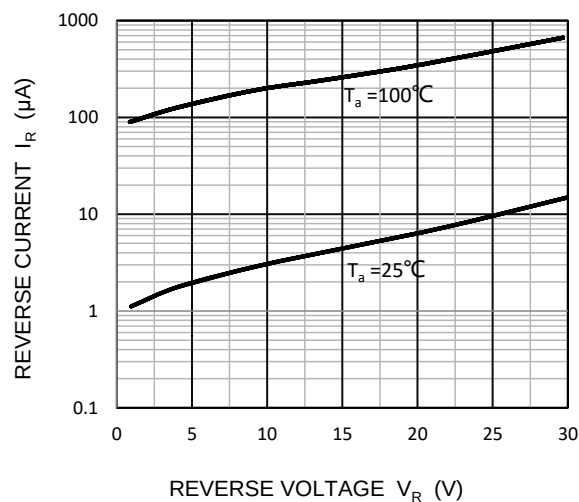
Type	Package	Marking	Minimum	Inner Box	Outer	Delivery
RB551V-30	SOD-323	D	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

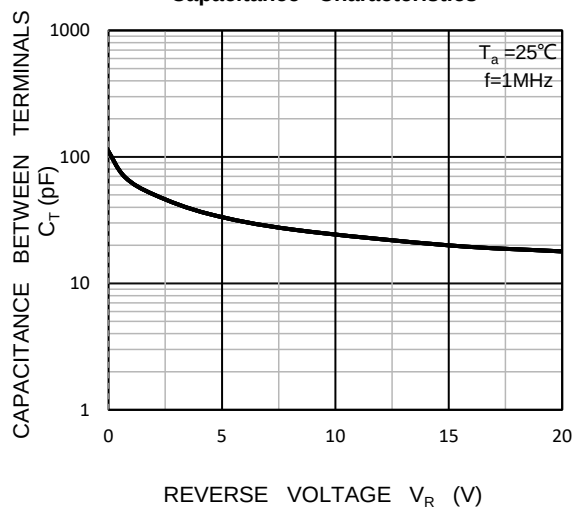
Forward Characteristics



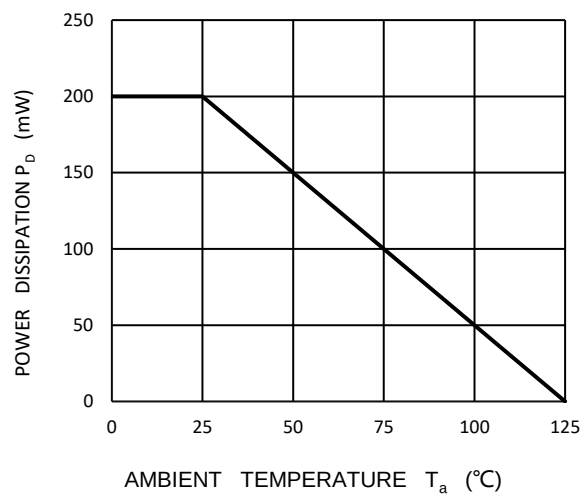
Reverse Characteristics



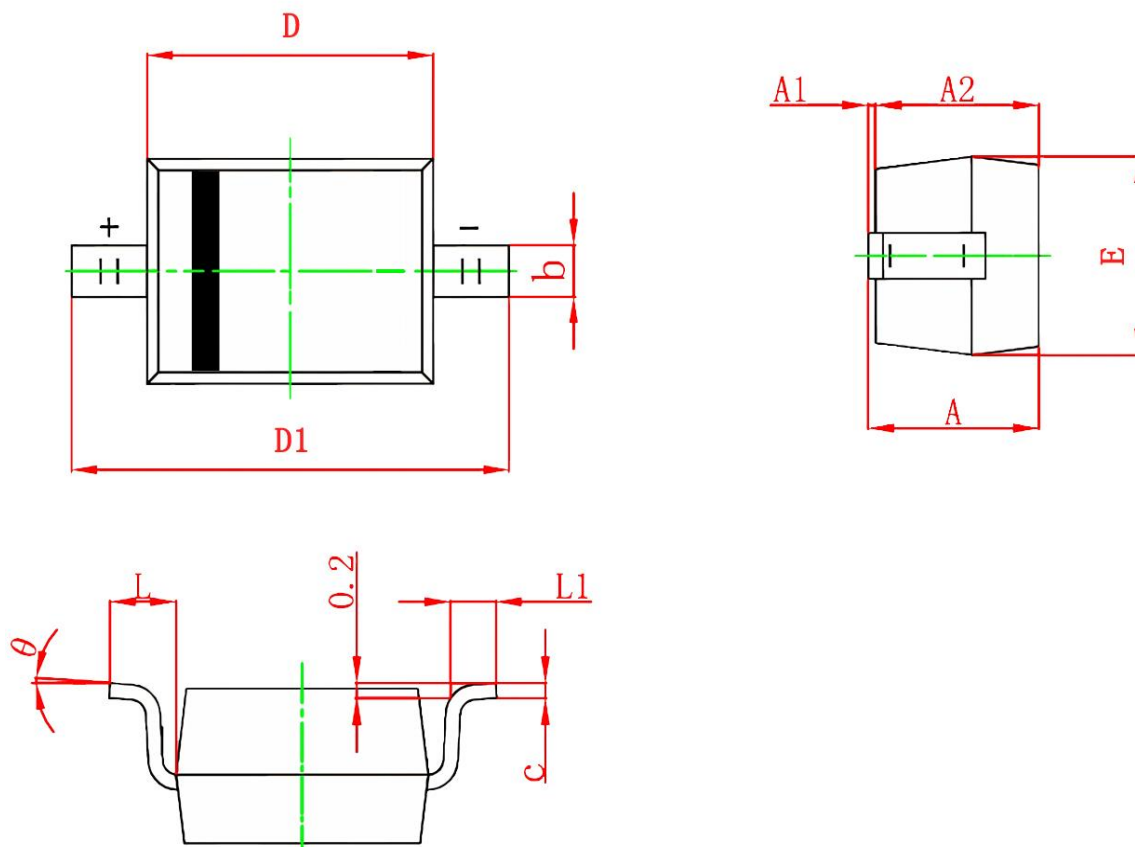
Capacitance Characteristics



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°