

Features

- Small Surface Mounting Type
- Low V_F
- High Reliability



SOD-323 top view



Schematic diagram

Applications

- High-Frequency Rectification Switching Regulators



Marking and pin assignment



Pb-Free



Halogen-Free

MAXIMUM RATINGS (Ta =25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Peak reverse voltage	40	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
$R_{\theta JA}$	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 CHARACTERISTICS(Ta=25°C unless otherwise specified)

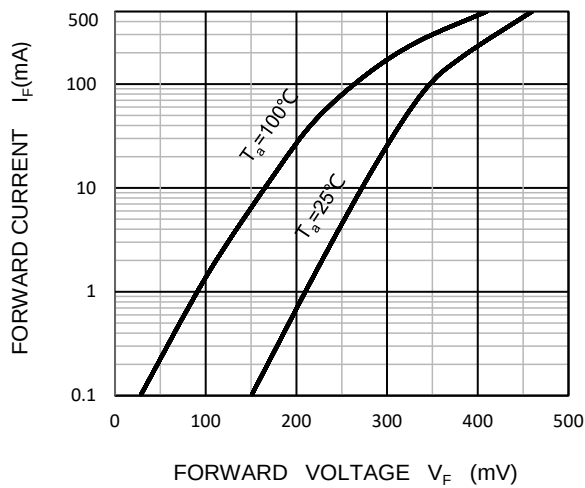
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=0.1mA$	40	--	--	V
I_R	Reverse voltage leakage current	$V_R=40V$	--	--	0.1	mA
V_F	Forward voltage	$I_F=500mA$	--		0.47	V

Ordering Information (Example)

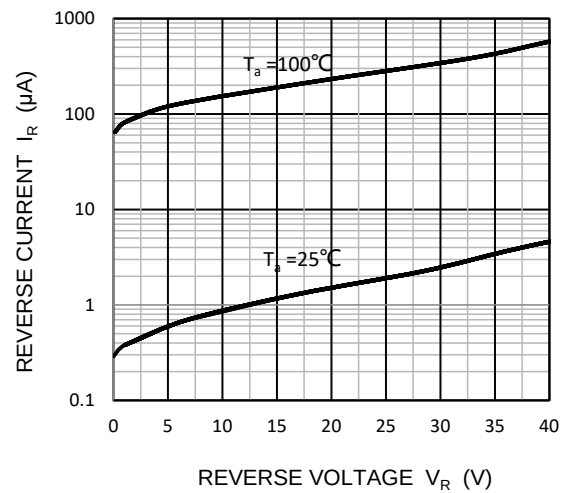
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB551V-40	SOD-323	D4	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

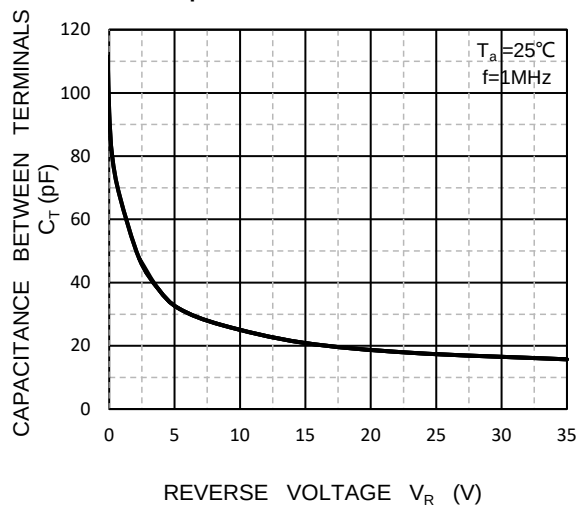
Forward Characteristics



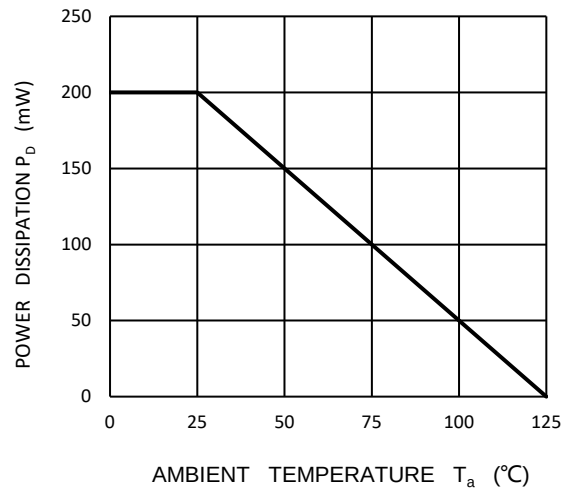
Reverse Characteristics



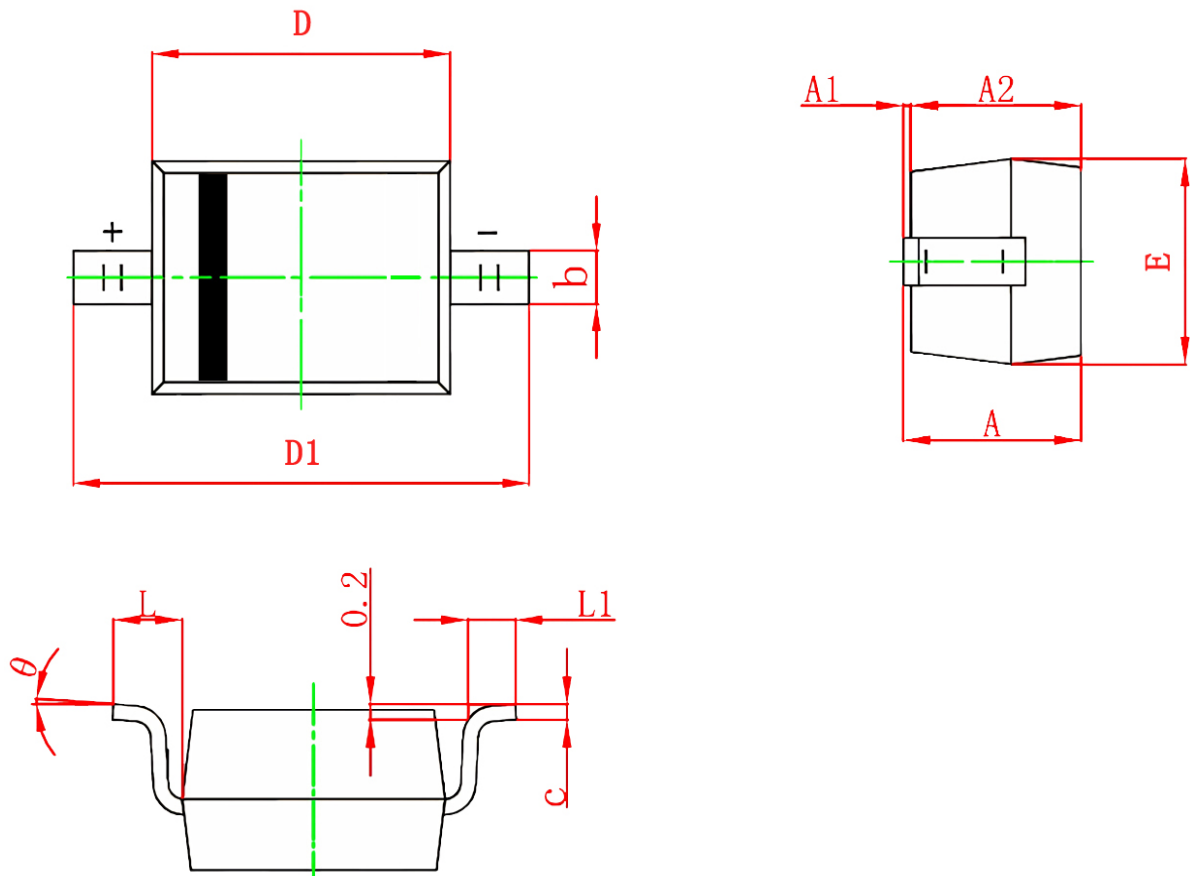
Capacitance Characteristics



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°