

Features

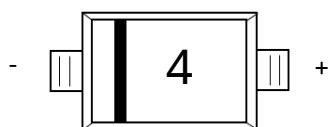
- Low current rectifier schottky diode
- Low voltage, low inductance
- For power supply



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_{RM}	Non-Repetitive Peak Reverse Voltage	45	V
V_R	Reverse Voltage	40	V
I_O	Average Rectified Output Current	0.1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	1	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	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	$^{\circ}\text{C}$

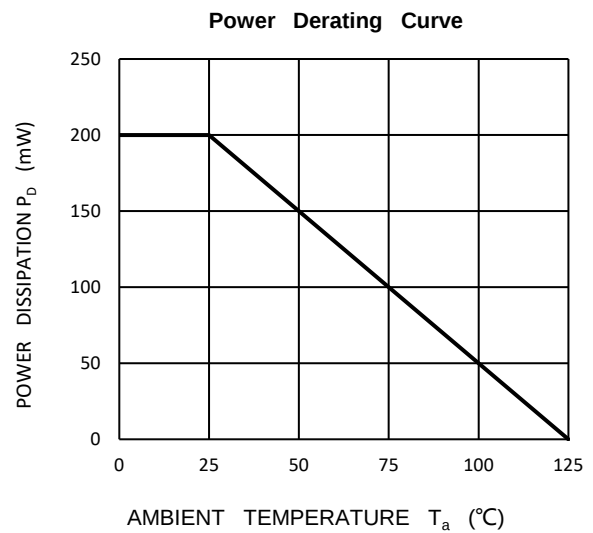
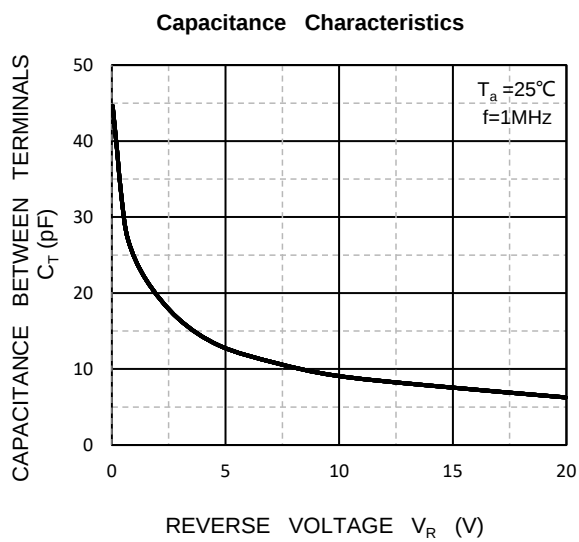
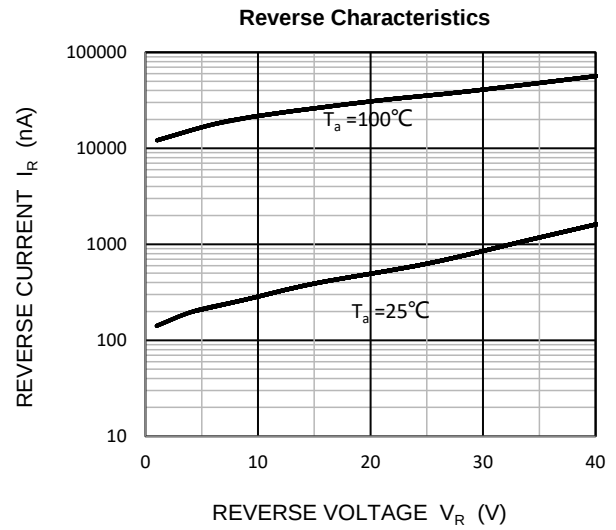
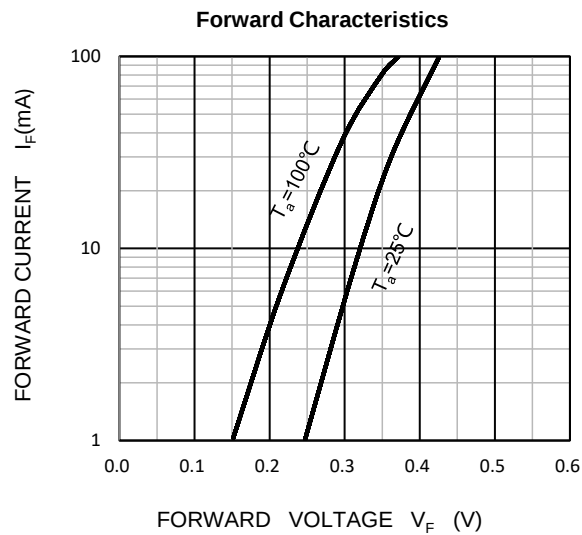
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_R	Reverse voltage leakage current	$V_R=10\text{V}$	--	--	30	μA
V_F	Forward voltage	$I_F=100\text{mA}$	--	--	0.55	V
		$I_F=10\text{mA}$	--	--	0.34	
C_T	Capacitance between terminals	$V_R=10\text{V}, f=1\text{MHz}$	--	6	--	pF

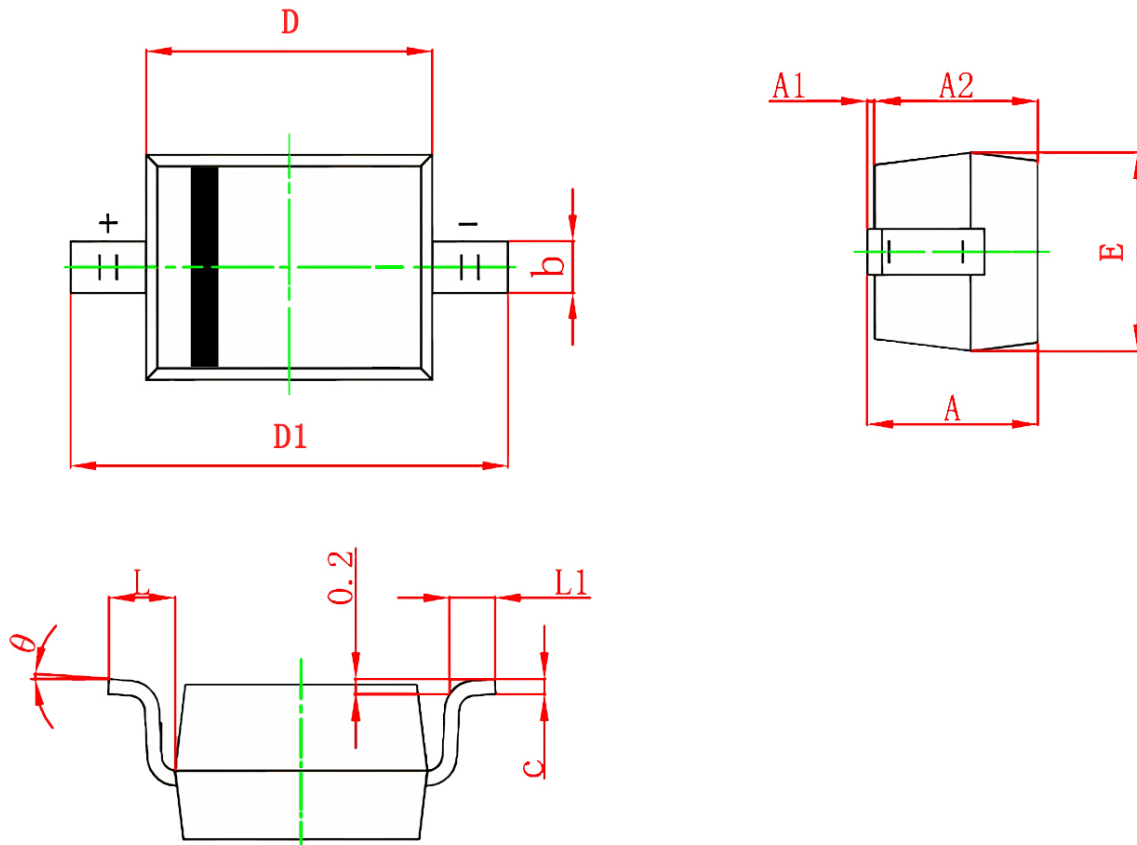
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
RB501V-40	SOD-323	4	3,000	45,000	180,000	7"reel

Typical Operating Characteristics



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°