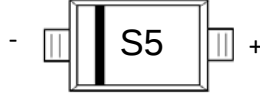
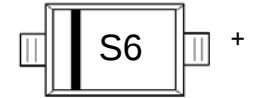


Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance



SOD-323 top view

SD103AWS	SD103BWS	SD103CWS
		
Marking:S4	Marking:S5	Marking:S6
		



Halogen-Free

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

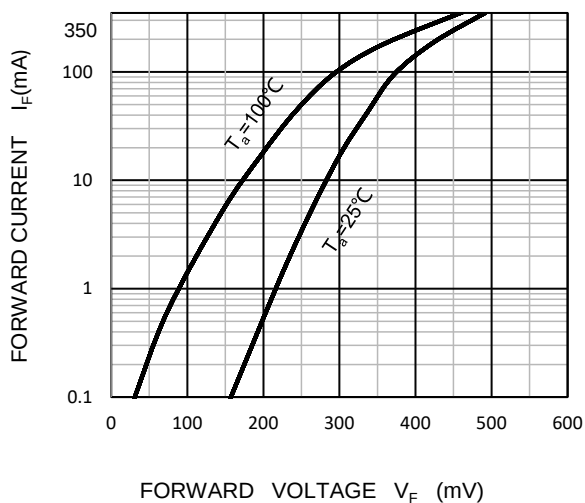
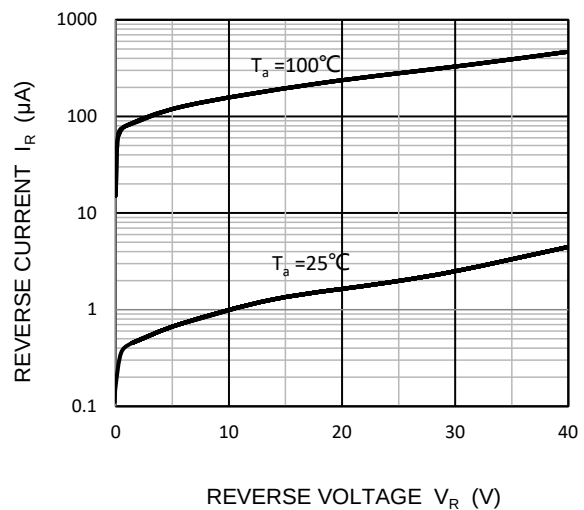
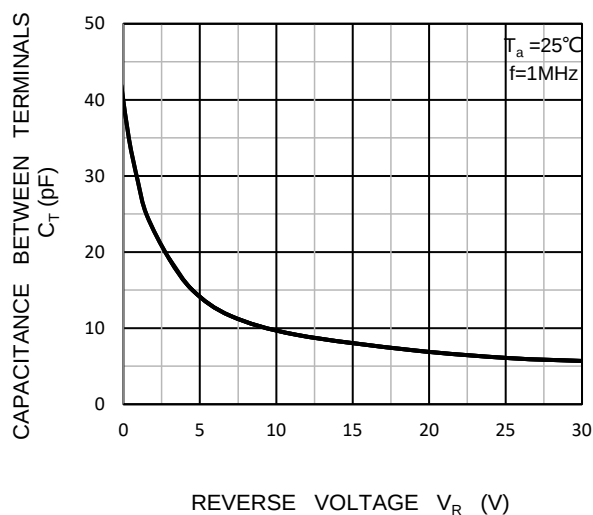
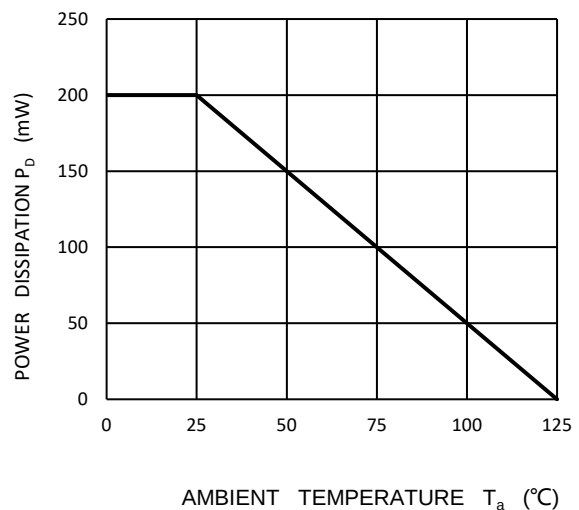
Symbol	Parameter	SD103AWS	SD103BWS	SD103CWS	Unit
V_R	Reverse Voltage	40	30	20	V
V_{RRM}	Maximum recurrent peak reverse voltage				
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	28	21	14	V
I_{FM}	Forward Continuous Current	350			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	2.0			A
P_d	Power Dissipation	200			mW
$R_{\theta JA}$	Thermal resistance junction to ambient	500			$^{\circ}\text{C/W}$
T_J	Operating Junction Temperature Range	$-40\sim+125$			$^{\circ}\text{C}$
T_{stg}	Operation Junction and Storage Temperature Range	$-55\sim+150$			$^{\circ}\text{C}$

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

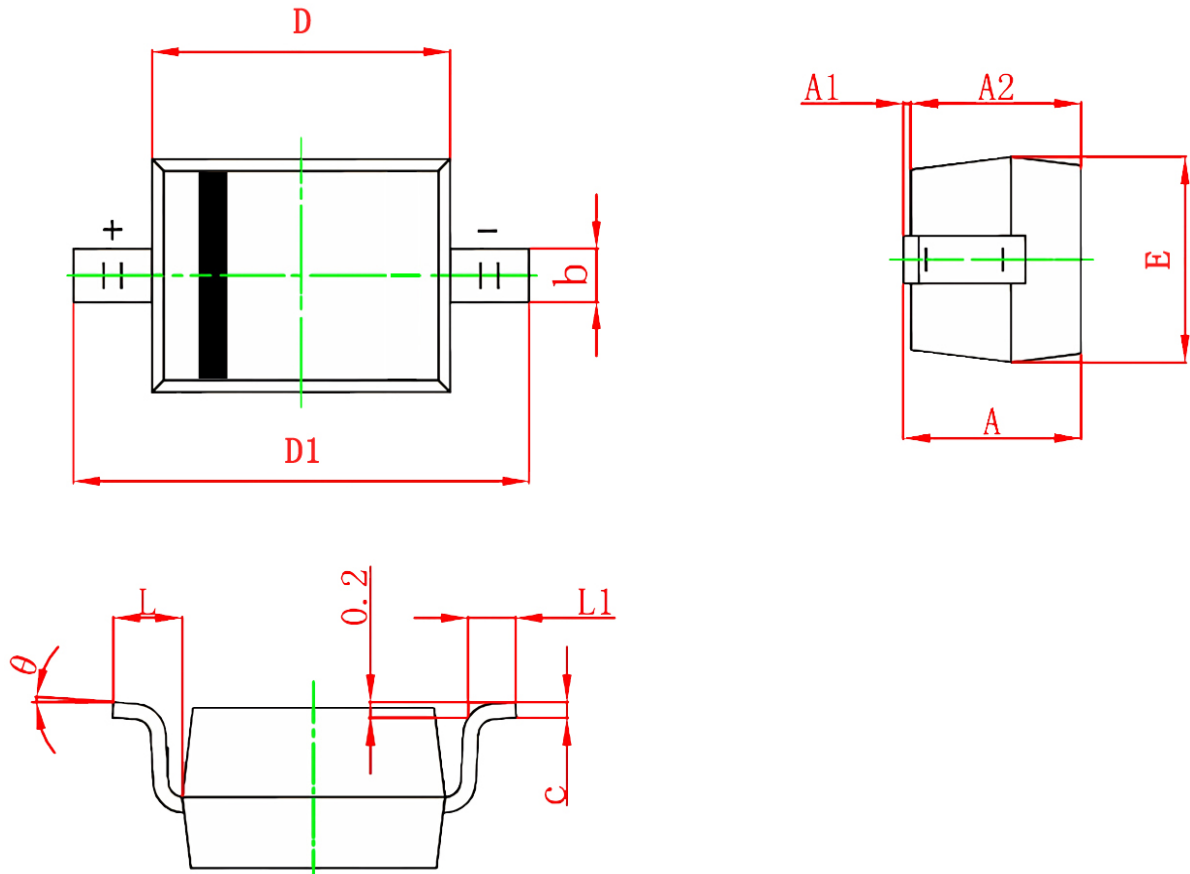
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	SD103AWS $I_R=100\mu\text{A}$	40	--	--	V
	Reverse voltage	SD103BWS $I_R=100\mu\text{A}$	30	--	--	
	Reverse voltage	SD103CWS $I_R=100\mu\text{A}$	20	--	--	
V_F	Forward voltage	$I_F=20\text{mA}$	--	--	0.37	V
		$I_F=200\text{mA}$	--	--	0.60	
I_{RM}	Reverse current	SD103AWS $V_R=30\text{V}$			5.0	μA
	Reverse current	SD103BWS $V_R=20\text{V}$				
	Reverse current	SD103CWS $V_R=10\text{V}$				
C_{tot}	Total capacitance	$V_R=0\text{V}, f=1.0\text{MHz}$	--	--	50	pF
t_{rr}	Reverse recovery time	$I_F=I_R=200\text{mA}, I_R=0.1\times I_R, R_L=100\Omega$	--	10		ns

Ordering Information (Example)

Type	Package	Marking	Minimum	Inner Box	Outer	Delivery
SD103AWS	SOD-323	S4	3,000	45,000	180,000	7"reel
SD103BWS	SOT-323	S5	3,000	45,000	180,000	7"reel
SD103CWS	SOD-323	S6	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°