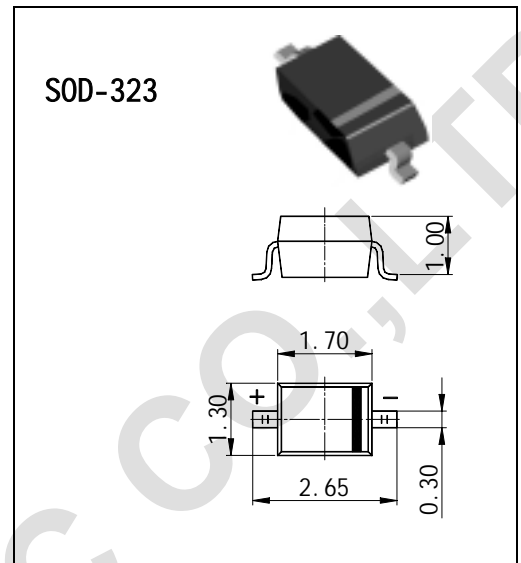


### Features

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



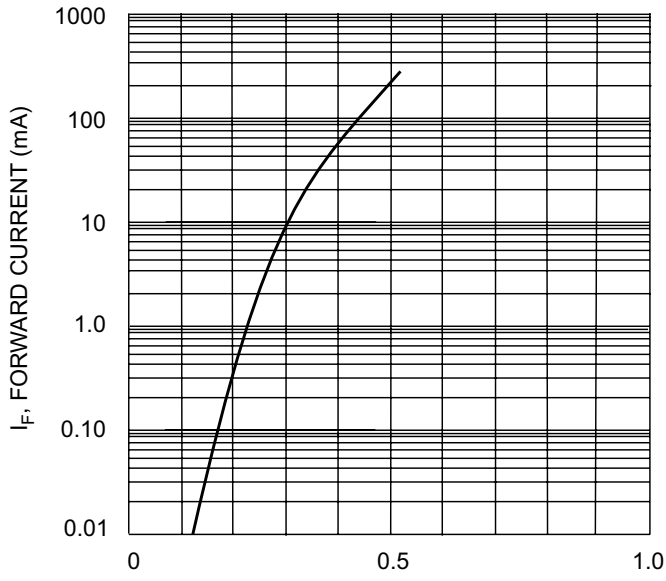
### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>				
Working Peak Reverse Voltage	V <sub>RWM</sub>	40	30	20	V
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	21	14	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>		350		mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	I <sub>FSM</sub>		1.5		A
Power Dissipation (Note 1)	P <sub>d</sub>		200		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>		625		°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>		-65 to +125		°C

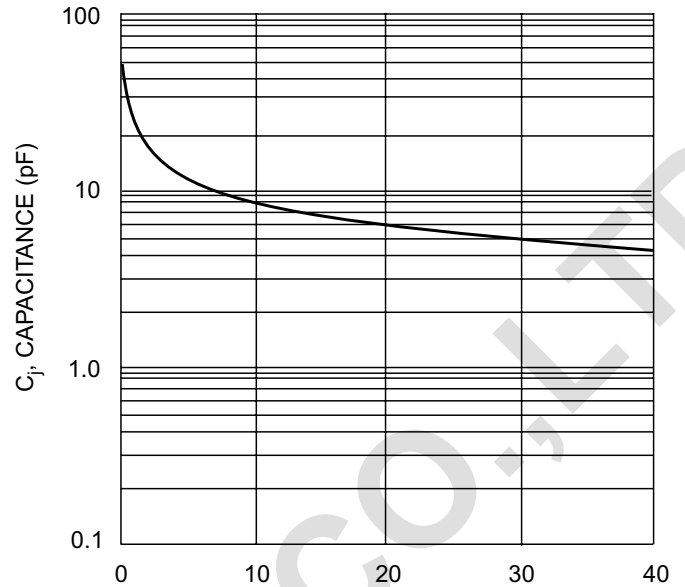
### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	40 30 20	—	—	V	I <sub>R</sub> = 10μA I <sub>R</sub> = 10μA I <sub>R</sub> = 10μA
Forward Voltage Drop	V <sub>FM</sub>	—	—	0.37 0.60	V	I <sub>F</sub> = 20mA I <sub>F</sub> = 200mA
Peak Reverse Current	I <sub>RM</sub>	—	—	5.0	μA	V <sub>R</sub> = 30V V <sub>R</sub> = 20V V <sub>R</sub> = 10V
Junction Capacitance	C <sub>j</sub>	—	50	—	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	—	10	—	ns	I <sub>F</sub> = I <sub>R</sub> = 200mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

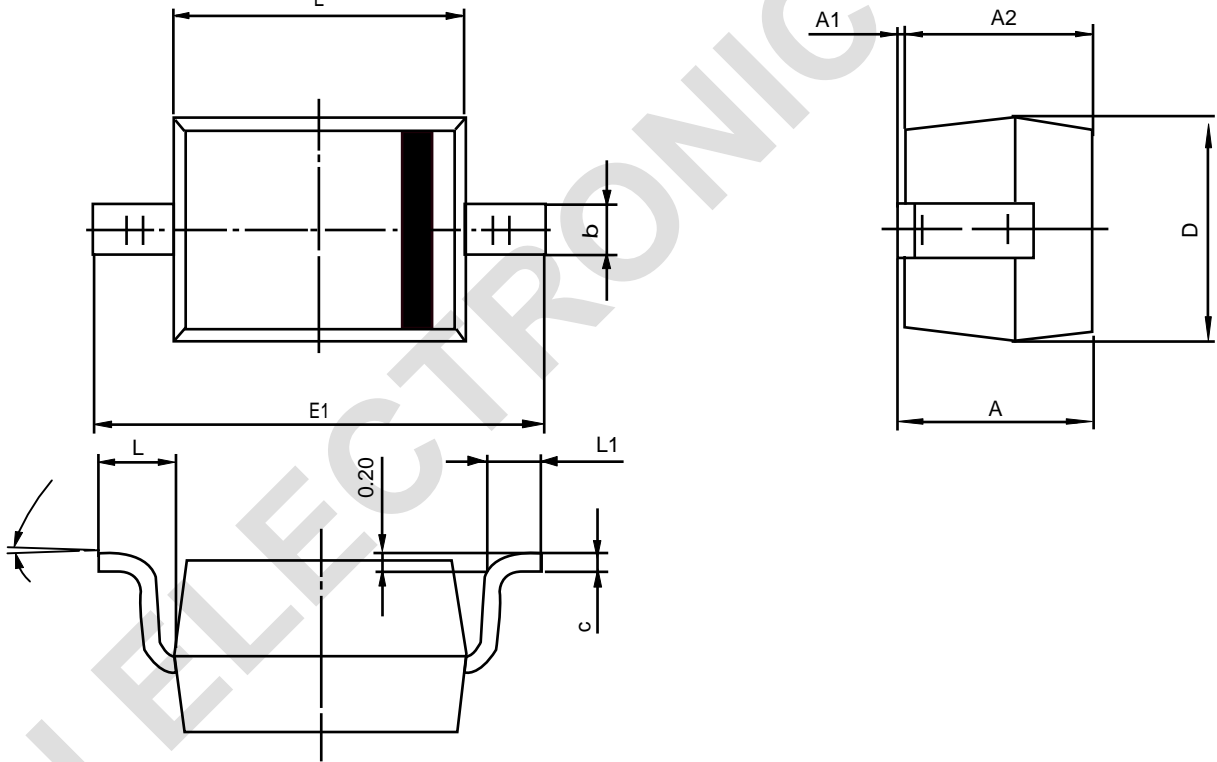
- Notes: 1. Valid provided that leads are kept at ambient temperature.  
2. Test period <3000μs.



$V_F$ , FORWARD VOLTAGE (V)  
Fig. 1 Typical Forward Characteristics



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.500	2.800	0.098	0.110
L	0.475REF		0.019REF	
L1	0.250	0.450	0.010	0.018
$\theta$	0°	8°	0°	8°