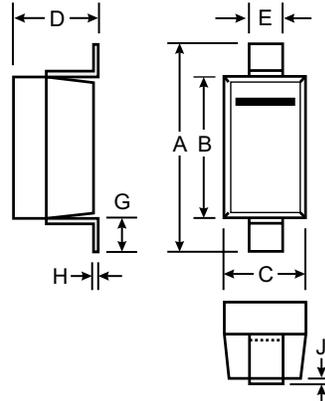


**Features**

- Green Products in Compliance with the RoHS Directive
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Ultra-Small Surface Mount Package

**Mechanical Data**

- Case: SOD-323, Plastic
- Polarity: Cathode Band
- Leads: Solderable per MIL-STD-202, Method 208
- SD103AWS-G Marking: S4
- SD103BWS-G Marking: S5 or S4
- SD103CWS-G Marking: S6 or S5 or S4
- Weight: 0.004 grams (approx.)



SOD-323				
Dim	Min	Max	Min	Max
A	2.30	2.70	0.091	0.106
B	1.75	1.95	0.069	0.077
C	1.15	1.35	0.045	0.053
D	0.25	0.35	0.010	0.014
E	0.05	0.15	0.002	0.006
G	0.70	0.95	0.028	0.037
H	0.30	—	0.012	—
			In mm	In inch

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

Characteristic	Symbol	SD103AWS-G	SD103BWS-G	SD103CWS-G	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.

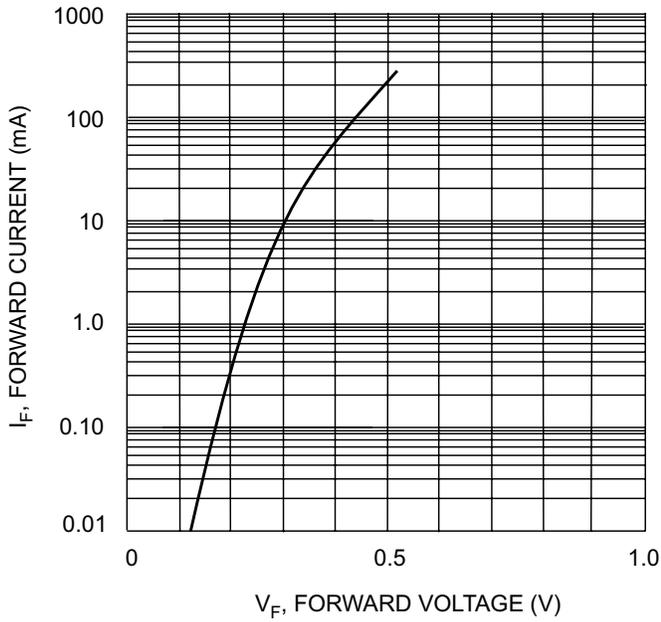


Fig. 1 Typical Forward Characteristics

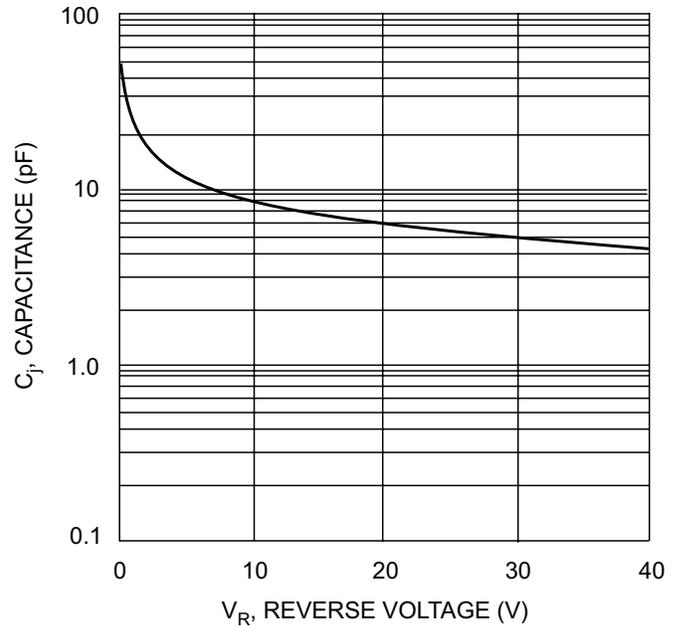


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

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