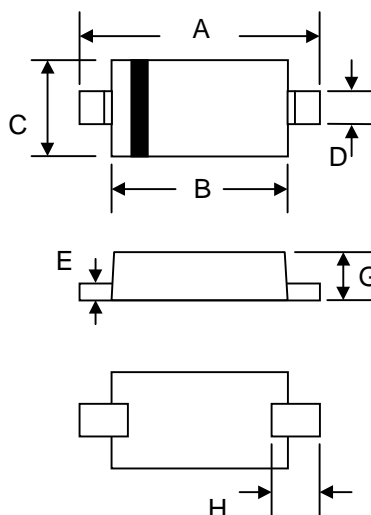
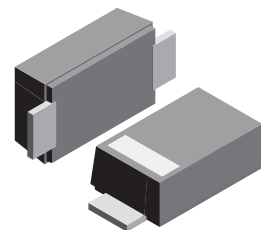


### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-0

### Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

### 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>	40	30	20	V
Working Peak Reverse Voltage	V <sub>RWM</sub>				
DC Blocking Voltage	V <sub>R</sub>				
Forward Continuous Current (Note 1)	I <sub>F</sub>	350			mA
Non-Repetitive Peak Forward Surge Current @ t < 1.0s	I <sub>FSM</sub>	2.0			A
Power Dissipation (Note 1)	P <sub>d</sub>	200			mW
Typical 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>	-55 to +125			°C

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

Characteristic	Symbol	All Types	Unit	Test Condition
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	40 30 20	V	@ I <sub>R</sub> = 10μA, t <sub>p</sub> < 300μs
Forward Voltage Drop	V <sub>FM</sub>	0.37 0.60	V	@ I <sub>F</sub> = 20mA @ I <sub>F</sub> = 200mA
Peak Reverse Leakage Current	I <sub>RM</sub>	5.0	μA	@ Rated DC Blocking Voltage
Typical Junction Capacitance	C <sub>j</sub>	50	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Typical 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

Note: 1. Valid provided that terminals are kept at ambient temperature.

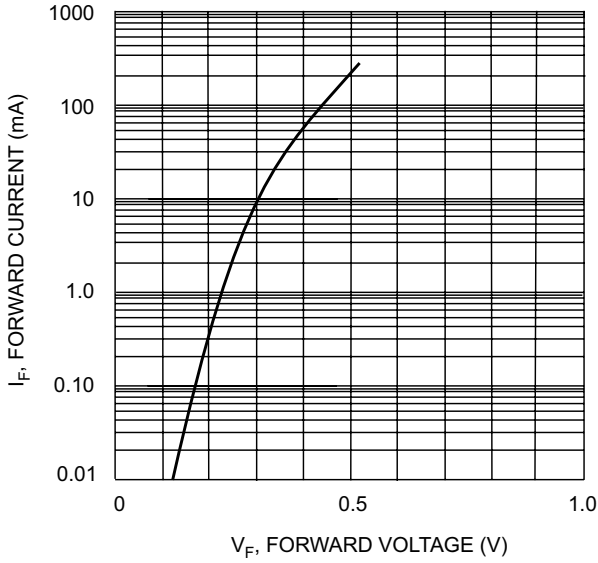


Fig. 1 Typical Forward Characteristics

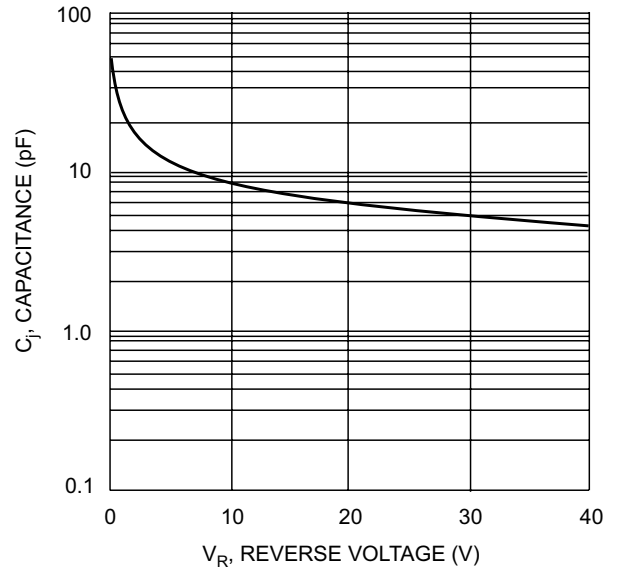


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage