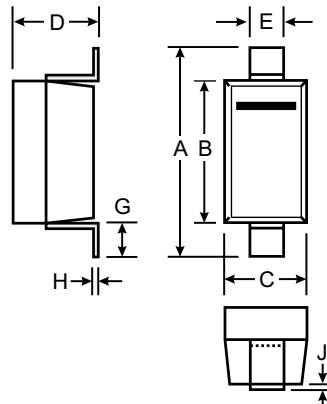


Features

- Low Turn-on Voltage
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection

Mechanical Data

- Case: SOD-323, Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: L9
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
All Dimensions in mm		

Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value		Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30		V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
RMS Reverse Voltage	$V_{R(\text{RMS})}$	21		V
Average Rectified Forward Current	I_O	100		mA
Forward Continuous Current (Note 1)	I_F	200		mA
Repetitive Peak Forward Current (Note 1)	I_{FRM}	300		mA
Forward Surge Current (Note 1) @ $t < 1.0\text{s}$	I_{FSM}	600		mA
Power Dissipation (Note 1)	P_d	200		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625		K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125		°C

Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	30	—	—	V	$I_{RS} = 100\mu\text{A}$
Forward Voltage (Note 2)	V_{FM}	—	—	240 320 400 500 1000	mV	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$
Reverse Leakage Current (Note 2)	I_{RM}	—	—	2.0	μA	$V_R = 25\text{V}$
Junction Capacitance	C_j	—	—	10	pF	$V_R = 1.0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	—	5.0	ns	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $R_L = 100\Omega$

Notes:

1. Valid provided that leads are kept at ambient temperature.
2. $t < 300\mu\text{s}$, duty cycle < 2%