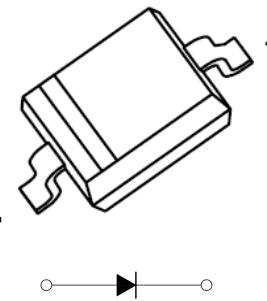


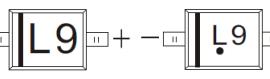
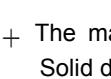
## SOD-323 Plastic-Encapsulate Diodes

**SOD-323**


### FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage

### MARKING: L9

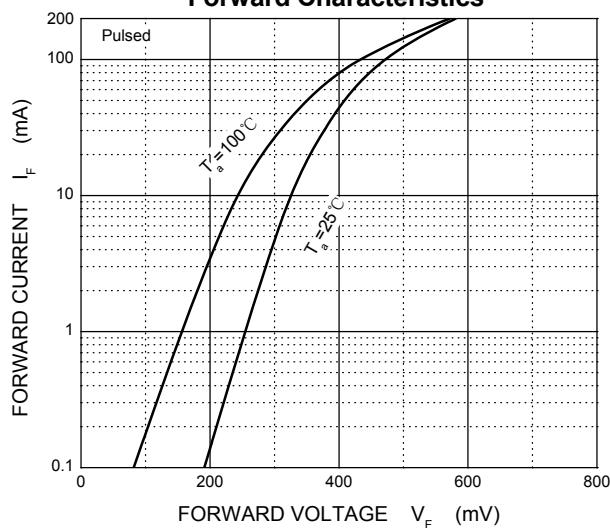
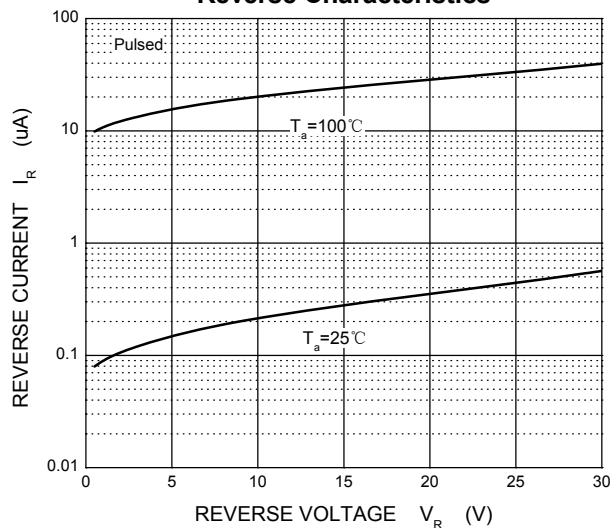
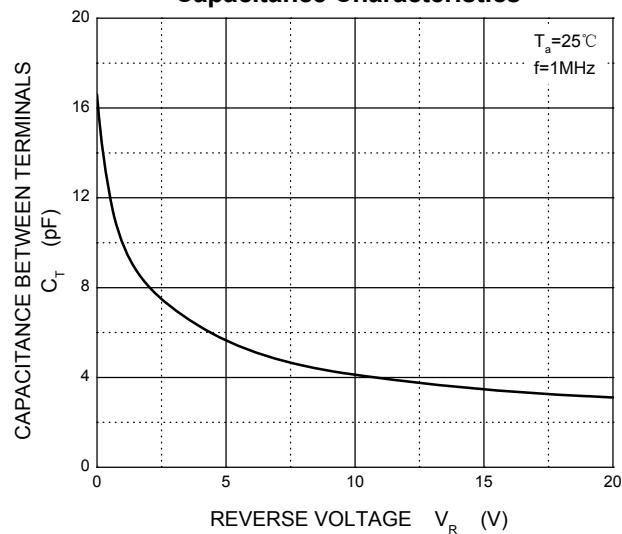
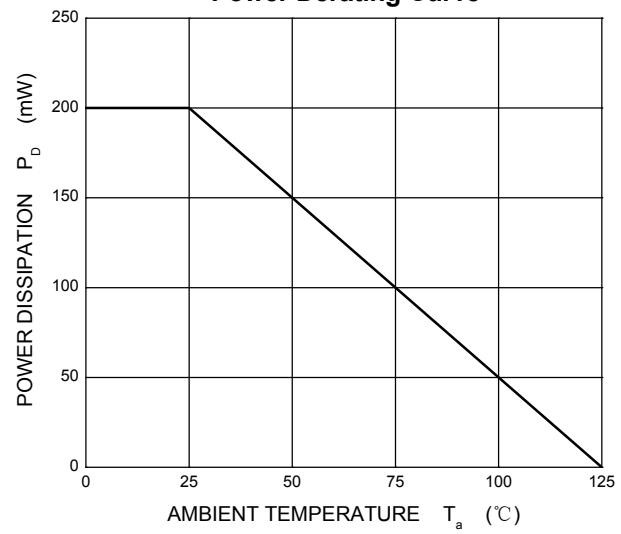
-  + -  + The marking bar indicates the cathode  
 Solid dot = Green molding compound device, if none,  
 the normal device.

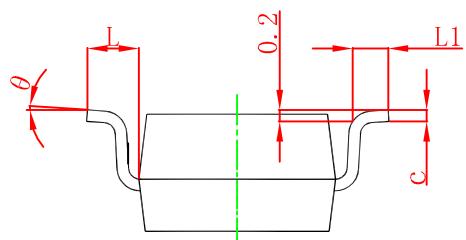
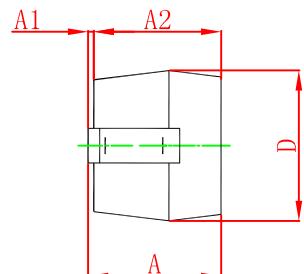
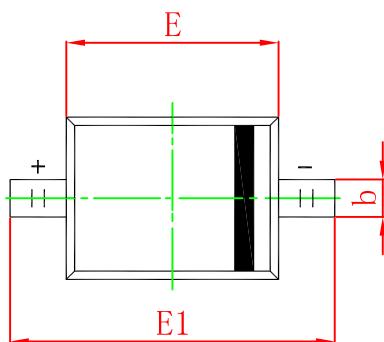
### Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
<b>Non-Repetitive Peak Reverse Voltage</b>	V <sub>RM</sub>	30	V
<b>DC Blocking Voltage</b>	V <sub>R</sub>	21	V
<b>Average Rectified Output Current</b>	I <sub>O</sub>	100	mA
<b>Forward Continuous Current</b>	I <sub>F</sub>	200	mA
<b>Repetitive Peak Forward Current</b>	I <sub>FRM</sub>	300	mA
<b>Non-repetitive Peak Forward Surge Current @t=8.3ms</b>	I <sub>FSM</sub>	600	mA
<b>Power Dissipation</b>	P <sub>D</sub>	200	mW
<b>Thermal Resistance Junction to Ambient</b>	R <sub>θ JA</sub>	500	°C/W
<b>Junction Temperature</b>	T <sub>J</sub>	125	°C
<b>Storage Temperature Range</b>	T <sub>STG</sub>	-55~+150	°C

### Electrical Characteristics @Ta=25°C

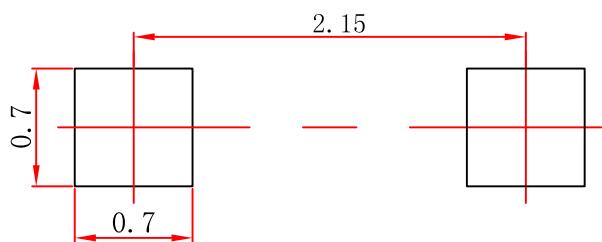
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
<b>Reverse breakdown voltage</b>	V <sub>(BR)</sub>	I <sub>R</sub> =100μA	30			V
<b>Forward voltage</b>	V <sub>F1</sub>	I <sub>F</sub> =0.1mA			240	mV
	V <sub>F2</sub>	I <sub>F</sub> =1.0mA			320	mV
	V <sub>F3</sub>	I <sub>F</sub> =10mA			400	mV
	V <sub>F4</sub>	I <sub>F</sub> =30mA			500	mV
	V <sub>F5</sub>	I <sub>F</sub> =100mA			1000	mV
<b>Reverse current</b>	I <sub>R</sub>	V <sub>R</sub> =25V			2.0	uA
<b>Reverse recovery time</b>	t <sub>rr</sub>	I <sub>F</sub> =10mA, I <sub>R</sub> =10mA to 1mA , R <sub>L</sub> =100 Ω			5.0	ns
<b>Capacitance between terminals</b>	C <sub>T</sub>	V <sub>R</sub> =1V,f=1MHz			10	pF

**Forward Characteristics**

**Reverse Characteristics**

**Capacitance Characteristics**

**Power Derating Curve**




Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
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	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

## SOD-323 Suggested Pad Layout



### Note:

1. Controlling dimension:in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.