

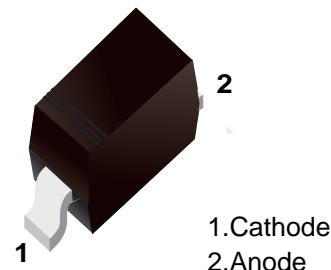
## High Voltage Switching Diodes

### ■ Features

- Fast switching
- Designed for surface mount application
- Plastic material-UL recognition flammability classification 94V-O

### ■ Applications

Surface mount fast switching diode



■ Simplified outline(SOD-323)



### ■ Absolute Maximum Ratings Ta = 25°C

Characteristic	Symbol	Value	Unit
Continuous Reverse Voltage	V <sub>R</sub>	250	V
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	250	V
Forward Continuous Current	I <sub>F</sub>	200	mA
Peak forward surge current	I <sub>FSM</sub>	625	mA
Power Dissipation	P <sub>d</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	635	°C/W
Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-55 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	250	-	V	I <sub>R</sub> =100μA
Forward Voltage	V <sub>F</sub>	-	1000 1250	mV	I <sub>F</sub> =100mA I <sub>F</sub> =200mA
Reverse Current	I <sub>R</sub>	-	0.1 100	μA	V <sub>R</sub> =200V V <sub>R</sub> =200V, T <sub>J</sub> =150°C
Diode Capacitance	C <sub>D</sub>	-	5	pF	V <sub>R</sub> =0, f=1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	-	50	ns	I <sub>F</sub> =I <sub>R</sub> =30mA, R <sub>L</sub> =100Ω

## ■ Typical Characteristics

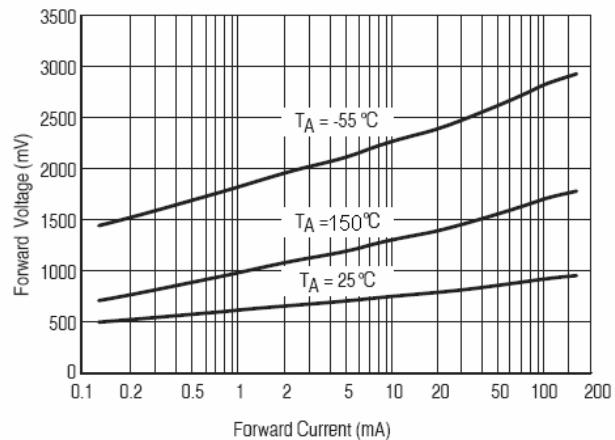


Figure 1. Forward Voltage

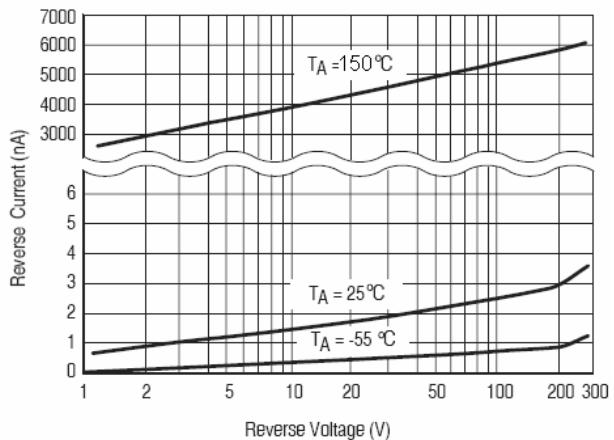
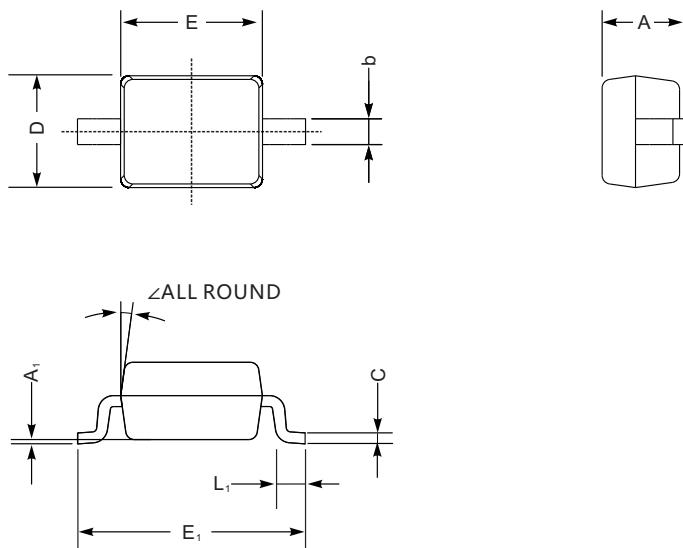


Figure 2. Reverse Leakage

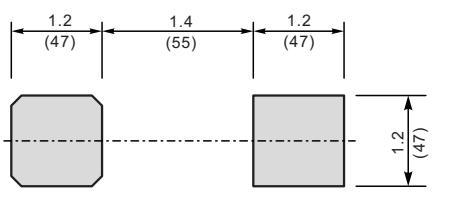
## ■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	θ
mm	max	1.1	0.15	1.4	1.8	2.75	0.4	0.45	0.2	9°
	min	0.8	0.08	1.2	1.4	2.55	0.25	0.2	—	
mil	max	43	5.9	55	70	108	16	16	8	9°
	min	32	3.1	47	63	100	9.8	7.9	—	

## ■ The recommended mounting pad size

Unit:  $\frac{\text{mm}}{(\text{mil})}$