

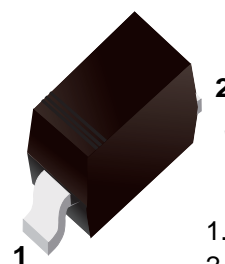
## Fast switching Diode

### ■ Features

- Fast Switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- For General Purpose Switching Applications
- High Conductance

### ■ APPLICATIONS

- Surface mount fast switching diode



1.Cathode  
2.Anode

### ■ Simplified outline(SOD-323)

Top View 

### ■ MARKING

Marking	T5
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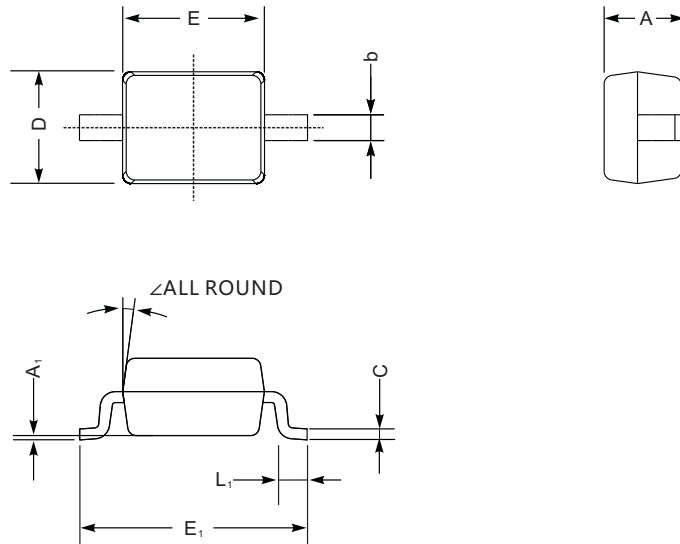
### ■ MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	500	mA
Average Rectified Output Current	$I_o$	250	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 $\mu$ s	$I_{FSM}$	4.0	A
@t=1.0 s		2.0	
Power Dissipation	$P_d$	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150	$^{\circ}C$

### ■ ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R=1.0\mu A$
Forward Voltage	$V_F$	0.62	0.72 0.855 1.0 1.25	V	$I_F=5mA$ $I_F=10mA$ $I_F=100mA$ $I_F=150mA$
Reverse Current	$I_R$	-	2.5 25	$\mu A$ nA	$V_R=75V$ $V_R=20V$
Capacitance between terminals	$C_T$	-	4.0	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	4.0	ns	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

## ■ SOD-323



SOD-323 mechanical data

UNIT		A	C	D	E	E <sub>1</sub>	b	L <sub>1</sub>	A <sub>1</sub>	∠
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	
	min	32	3.1	47	63	100	9.8	7.9	—	

## ■ The recommended mounting pad size

