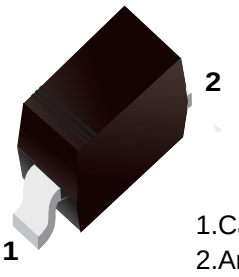
■Surface MountFast Switching Diode



1.Cathode
2.Anode

■ **Simplified outline(SOD-323)**

■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak repetitive reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	75	V
RMS reverse voltage	$V_{R(RMS)}$	53	V
Average rectified output current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I_{FSM}	2.0 1.0	A
Power dissipation	P_D	400	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	315	℃/W
Operating and storage temperature range	T_j,T_{stg}	-65 to +150	℃

■ Electrical Characteristics Ta = 25℃

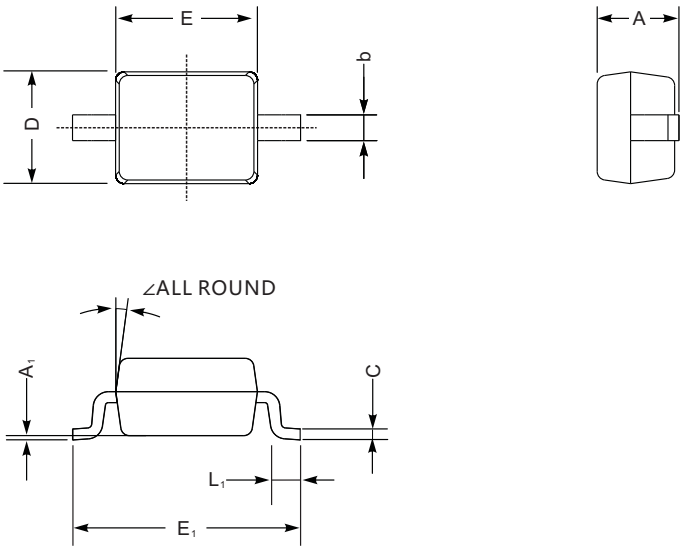
Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 1.0μA	75			V
Forwarad voltage	V_{FM}	I_F = 1.0mA I_F = 10mA I_F = 50mA I_F = 150mA			0.745 0.855 1.0 1.25	V
Peak Revrse current	I_{RM}	V_R = 75V V_R = 75V,TJ=150℃ V_R = 25V,TJ=150℃ V_R = 20V			1.0 50 30 25	μA μA nA nA
Junction Capacitance	C_J	V_R = 0, f = 1.0MHz			2.0	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA,I_{rr}=0.1xI_R,R_L=100Ω			4.0	ns

■ Marking

Marking	T6

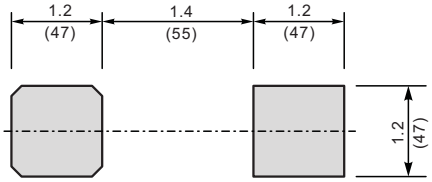
Package Outline SOD-323

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	E_1	b	L_1	A_1	∠
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



Unit: mm (mil)

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-323	Tape/Reel,7"reel	3000	EIA-481-1