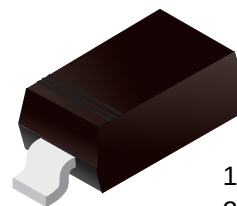


Fast switching Diode

■ Features

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



1.Cathode
2.Anode

■ Simplified outline(SOD-123)

Top View

■ APPLICATIONS

- Surface mount fast switching diode

■ 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 μs	I_{FSM}	4.0	A
@t=1.0 s		2.0	
Power Dissipation	P_d	350	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	357	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	°C

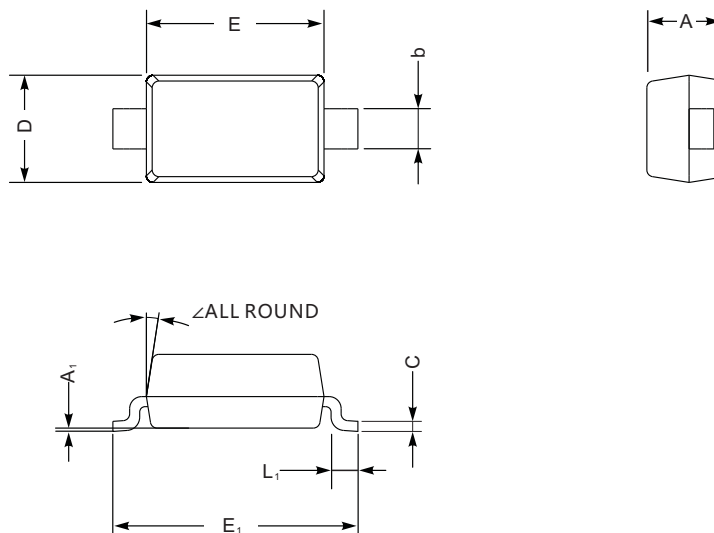
■ ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R=1.0\mu A$
Forward Voltage	V_{F1} V_{F2} V_{F3} V_{F4}	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_{R1} I_{R2}	-	2.5 25	μA 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	$I_F=I_R=10mA$, $I_{rr}=0.1 \times I_R, R_L=100\Omega$

Package Outline

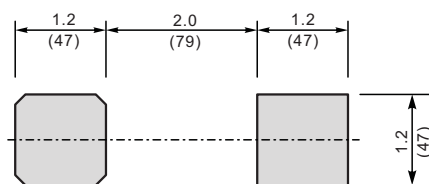
SOD-123

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	

The recommended mounting pad size



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

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123	Tape/Reel, 7" reel	3000	EIA-481-1