

### Plastic-Encapsulate Diodes

#### SWITCHING DIODE

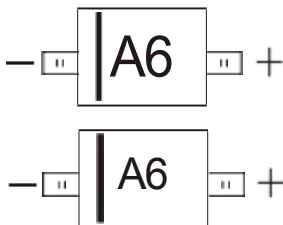
##### FEATURES

- Very Small Plastic Package
- High Switching Speed

##### APPLICATIONS

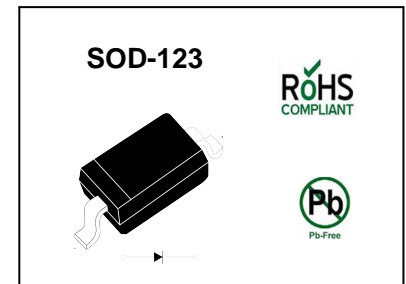
- High-Speed Switching in e.g. Surface Mounted Circuits

##### MARKING: A6 \*



##### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



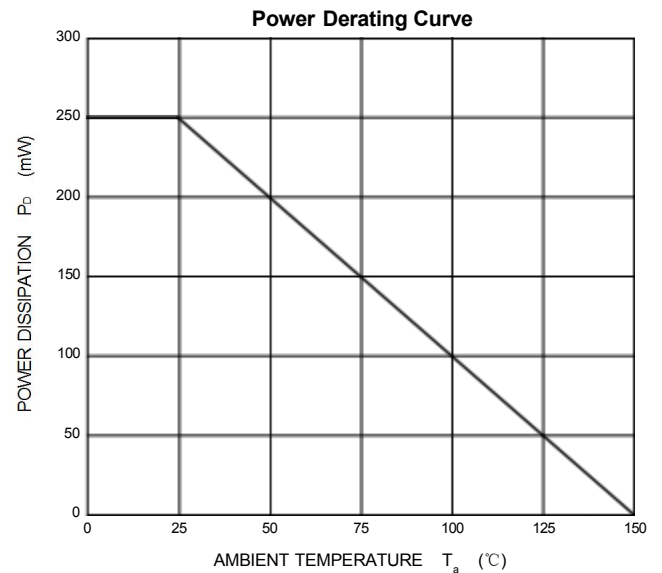
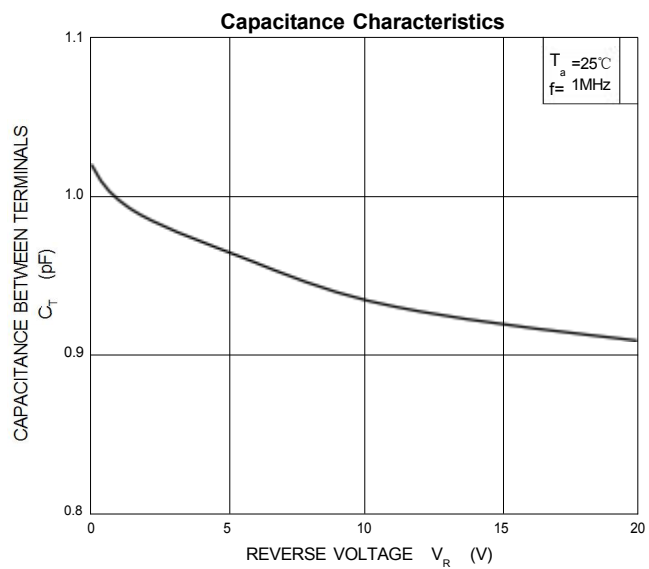
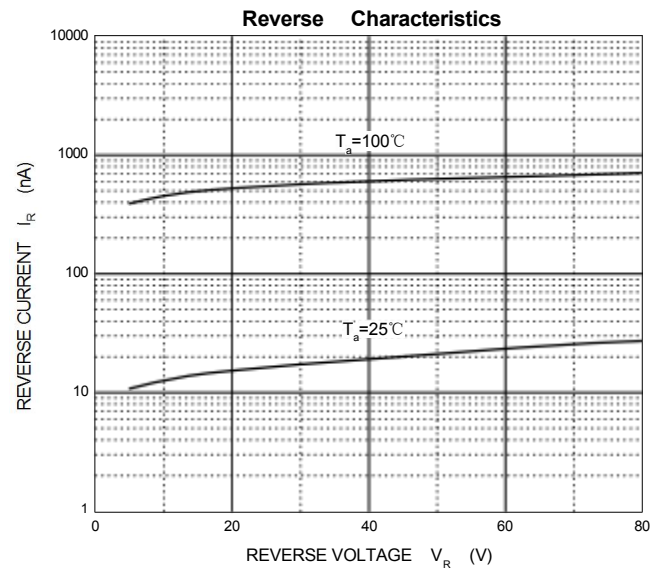
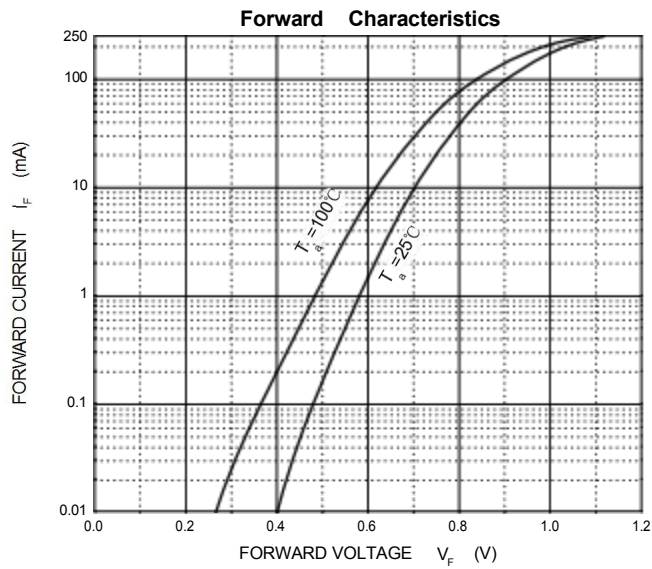
#### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	85	V
$V_R$	DC Blocking Voltage	75	
$I_o$	Continuous Forward Current	250	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
$P_D$	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	500	$^{\circ}\text{C/W}$
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

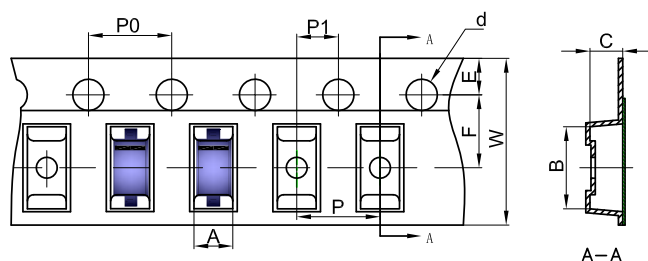
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	100			V
Reverse current	$I_R$	$V_R=25\text{V}$			30	nA
		$V_R=75\text{V}$			1	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	
		$I_F=50\text{mA}$			1	
		$I_F=150\text{mA}$			1.25	
Total capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$			1.5	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1\times I_R$			4	ns

### Typical Characteristics



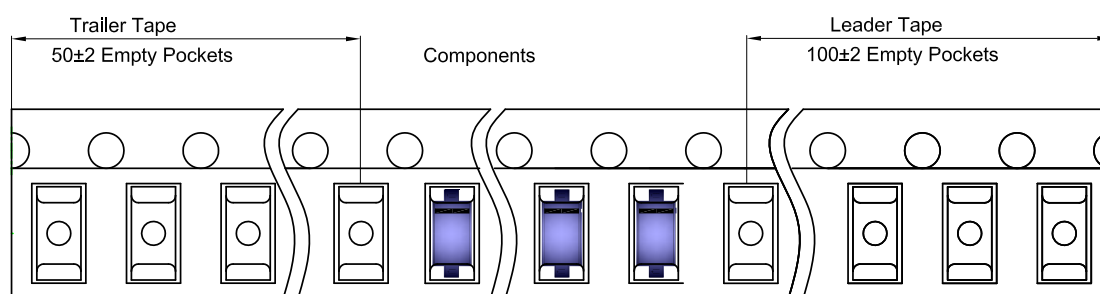
### SOD-123 Tape and Reel

#### SOD-123 Embossed Carrier Tape

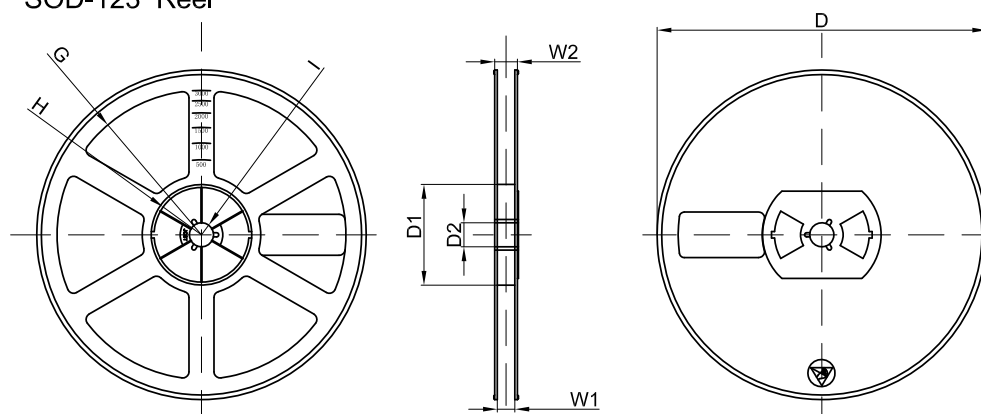


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

#### SOD-123 Tape Leader and Trailer

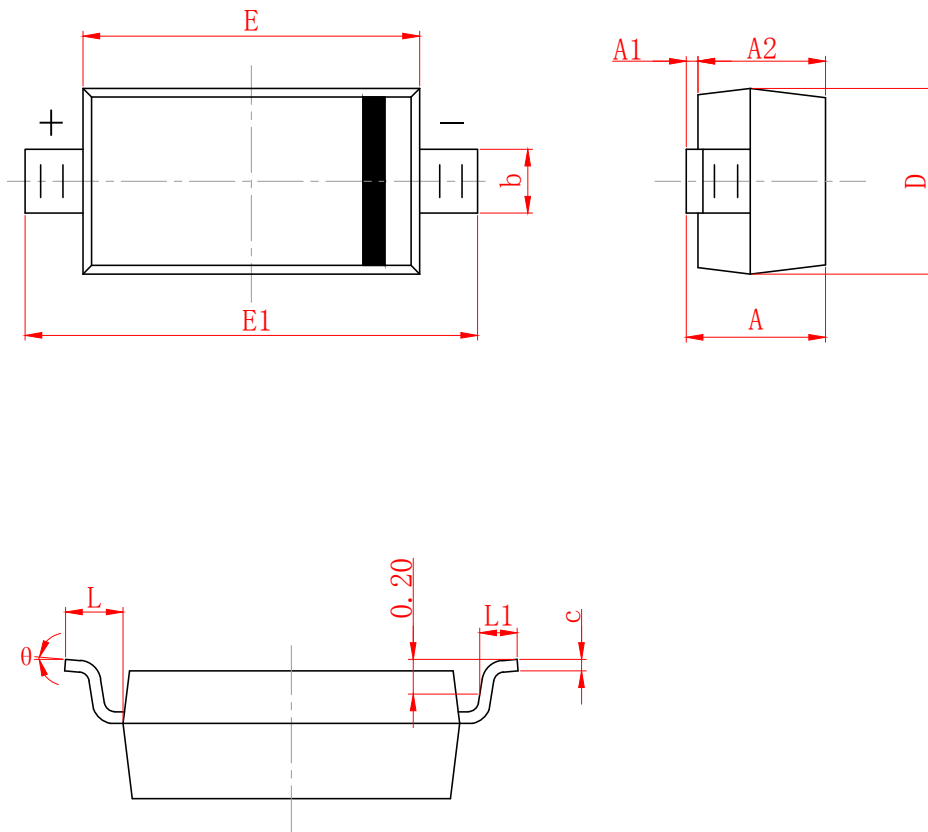


#### SOD-123 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	



SYMBOL	MILLIMETER	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.008	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500 (REF)	
L1	0.250	0.450
θ	0°	8°

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