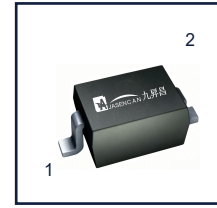


Features

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



SOD-123



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RM}	Non-repetitive Peak Reverse Voltage Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
V_{RRM}			
V_{RWM}			
V_R			
$V_{R(RMS)}$	RMS Reverse Voltage	71	V
I_O	Average Rectified Output Current	150	mA
I_{FM}	Forward Continuous Current	300	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	2.0	A
P_d	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	600	$^{\circ}\text{C}/\text{W}$
T_J	Operation Junction Temperature Range	-40~+125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

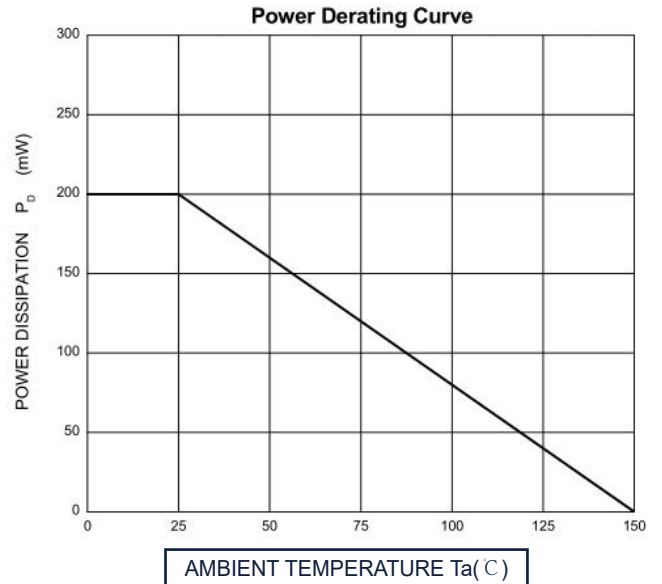
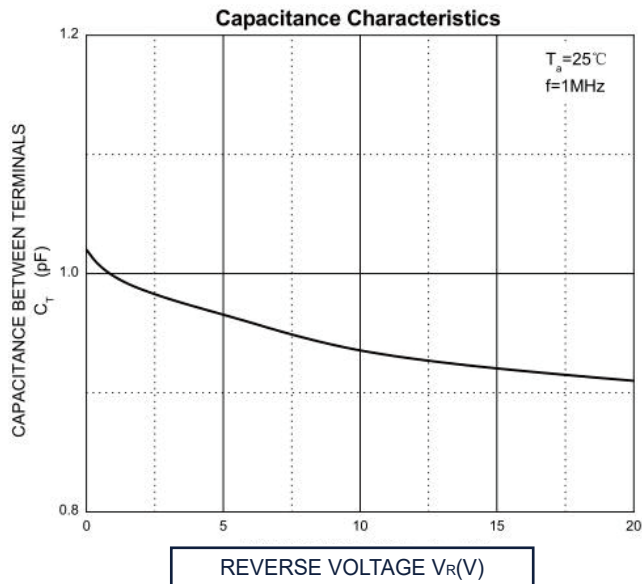
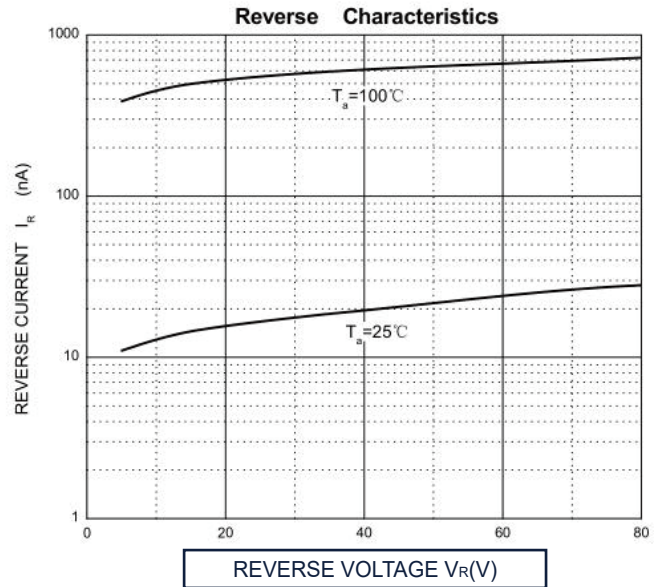
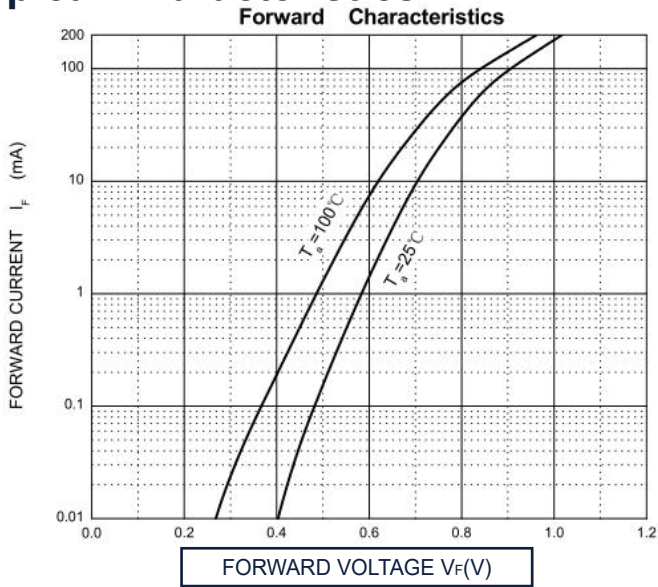
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu\text{A}$	100			V
I_R	Reverse voltage leakage current	$V_R=75\text{V}$			1	μA
		$V_R=20\text{V}$			25	nA
V_F	Forward voltage	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1.0	V
		$I_F=150\text{mA}$			1.25	V
C_D	Diode capacitance	$V_R=0\text{V}, f=1.0\text{MHz}$			2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1I_{FR}, R_L=100\Omega$			4	nS

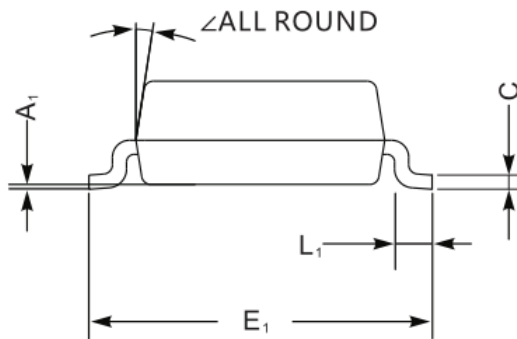
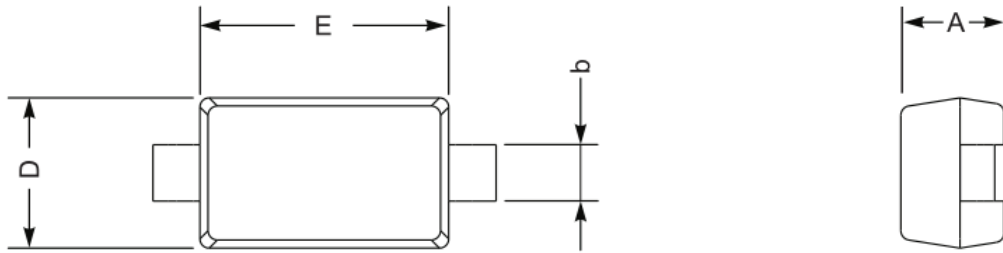
Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
1N4148W	SOD-123	<div style="border: 1px solid black; padding: 5px; display: inline-block;">1N4148W</div> 产品名称 product name	T4	3000

Typical Characteristics



SOD-123 Package Outline Dimensions



Symbol	mm		mil	
	min	max	min	max
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E1	3.6	3.9	142	154
L1	0.25	0.45	10	18
b	0.5	0.7	20	28
A1		0.2		8
∠	9°			