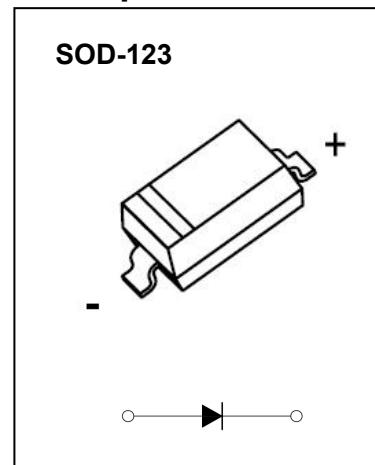
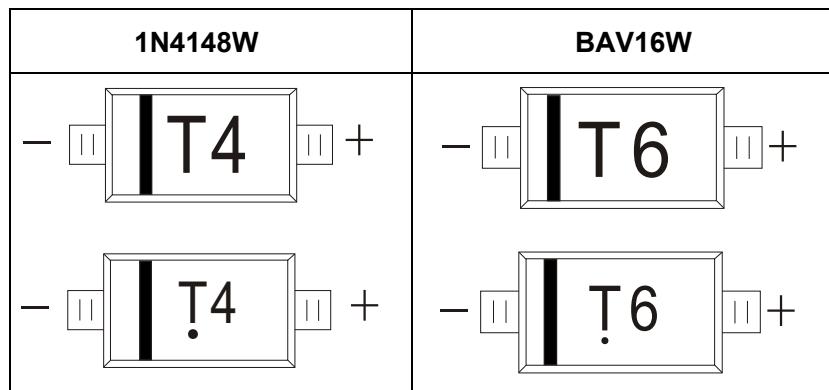


**FEATURES**

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

**SOD-123 Plastic-Encapsulate Diodes**

**MARKING: T6,T4**


The marking bar indicates the cathode

Solid dot = Green molding compound device, if none, the normal device.

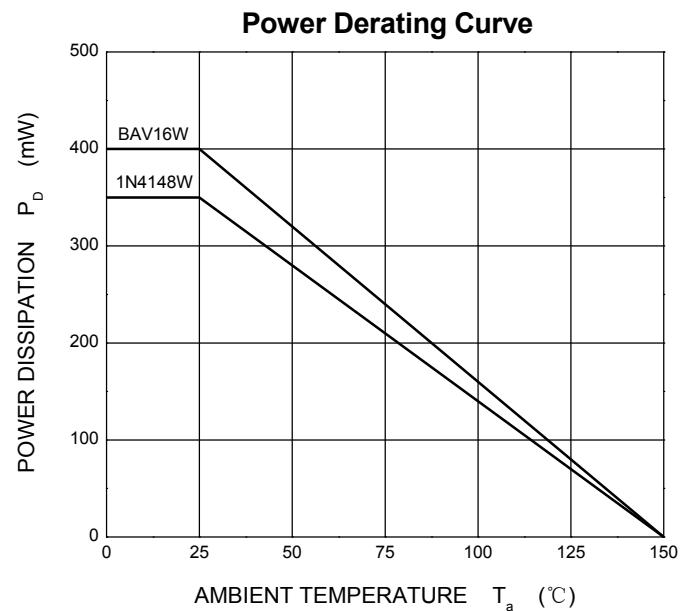
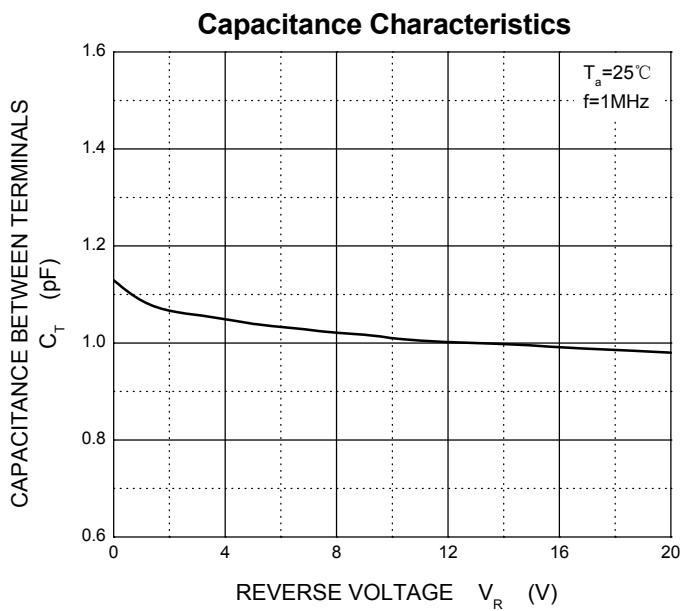
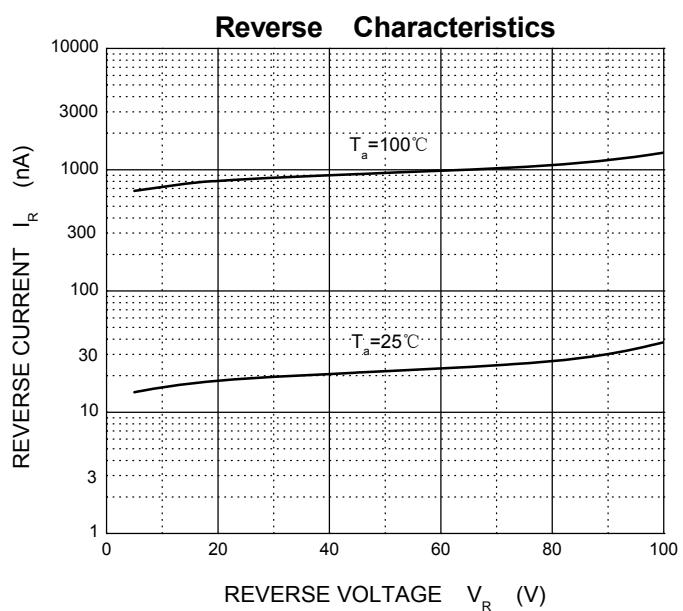
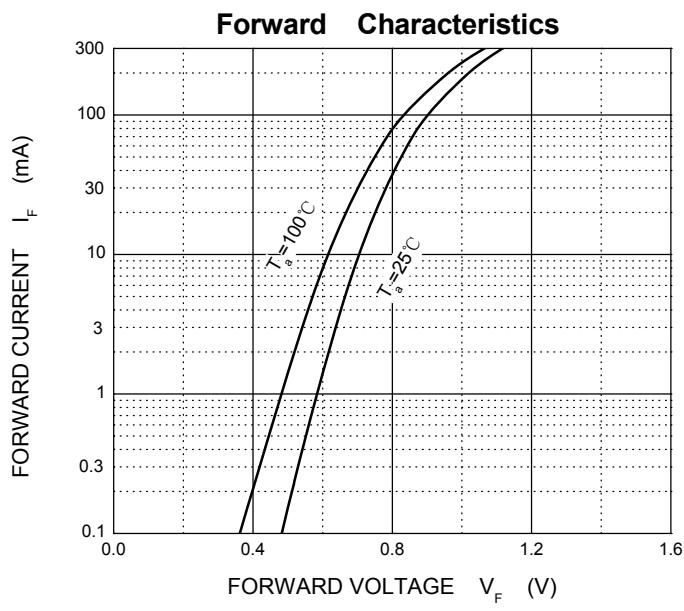
**Maximum Ratings and Electrical Characteristics, Single Diode @ $T_a=25^\circ\text{C}$** 

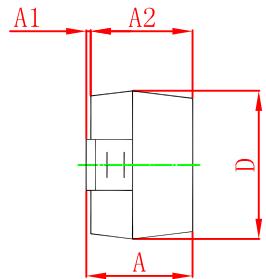
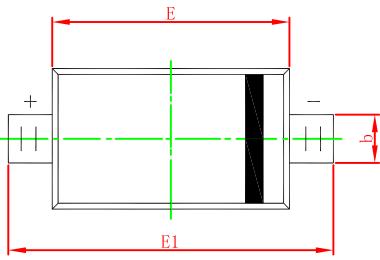
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	100	V
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	71	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	2.0	A
Power Dissipation 1N4148W BAV16W	$P_d$	350 400	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	250	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{STG}$	-55~+150	°C

Note 1: Device mounted on 1"x1" FR4 PCB, 1oz single-side copper.

**Electrical Ratings @Ta=25°C**

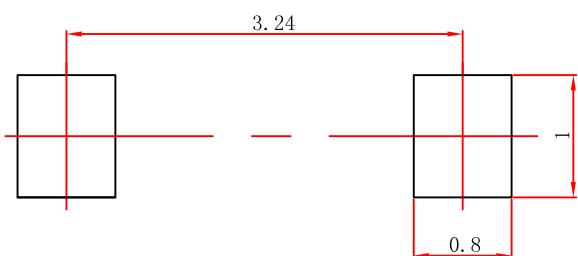
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
<b>Forward voltage</b>	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
<b>Reverse current</b>	I <sub>R1</sub>			1	µA	V <sub>R</sub> =75V
	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
<b>Capacitance between terminals</b>	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V,f=1MHz
<b>Reverse recovery time</b>	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1XI <sub>R</sub> , R <sub>L</sub> =100Ω





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

## SOD-123 Suggested Pad Layout



### Note:

1. Controlling dimension:in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.