

SOD-123 Plastic-Encapsulate Diodes

• Features

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



SOD-123

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	V
DC Blocking Voltage	V _R	100	V
RMS Reverse Voltage	V _{R(RMS)}	71	V
Average Rectified Output Current	I _O	150	mA
Forward Continuous Current	I _{FM}	300	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	350	mW
Thermal Resistance from Junction to Ambient	R _{ΘJA}	357	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{stg}	-55~+150	°C

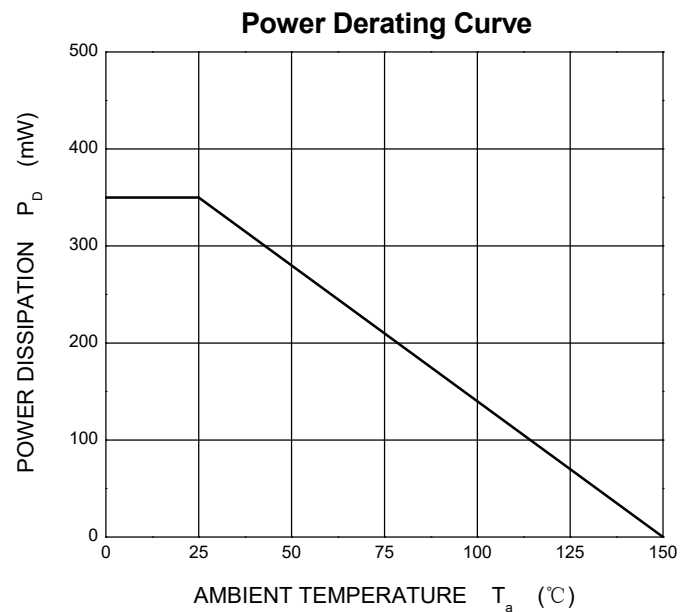
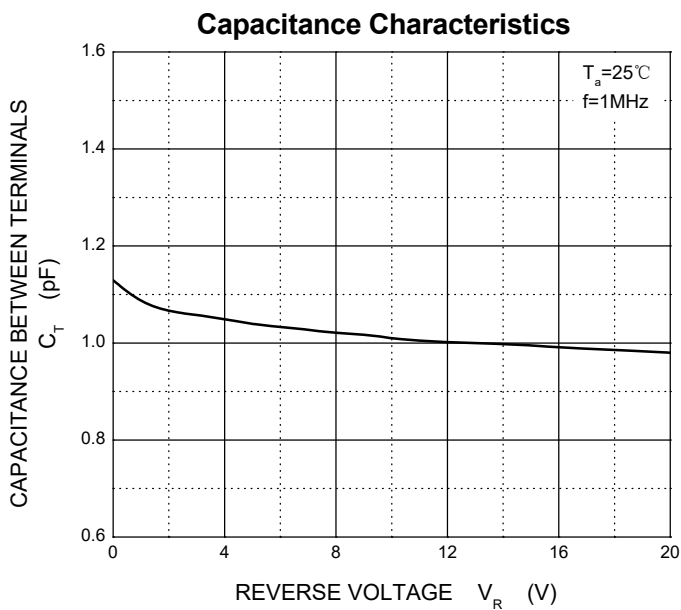
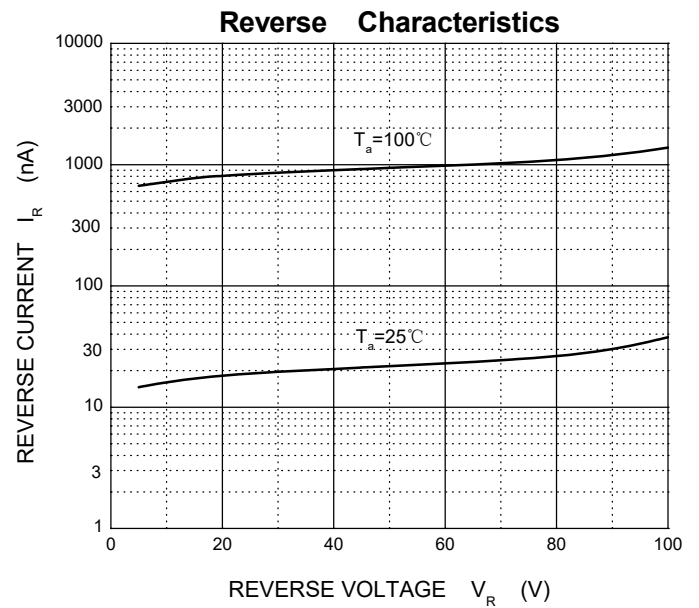
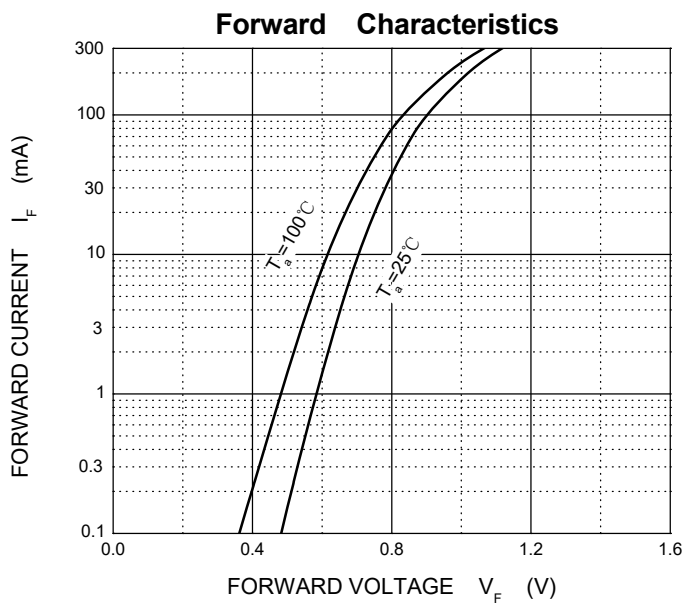
• ELECTRICAL CHARACTERISTICS (T_a=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V _{F1}	I _F =1mA			0.715	V
	V _{F2}	I _F =10mA			0.855	V
	V _{F3}	I _F =50mA			1.0	V
	V _{F4}	I _F =150mA			1.25	V
Reverse current	I _{R1}	V _R =75V			1	μA
	I _{R2}	V _R =20V			25	nA
Capacitance between terminals	C _T	V _R =0V, f=1MHz			2	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω			4	ns

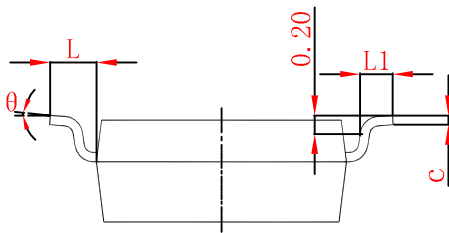
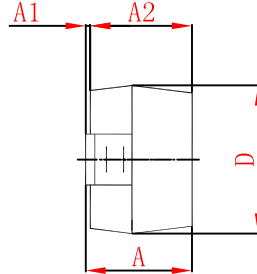
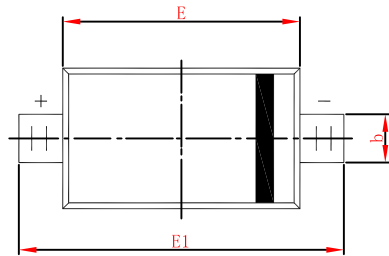
• Ordering Information:

Part NO.	1N4148W
Marking	T4
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

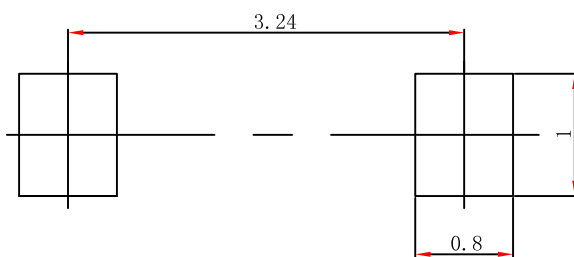
• Typical Characteristics



SOD-123 Package Outline Dimensions



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°



Note:

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