SOD-523 Plastic-Encapsulate Diodes

• Features

- Small Package
- Low Reverse Current
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion

SOD-523

• MAXIMUM RATINGS (T_C=25℃)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	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	150	mW
Thermal Resistance from Junction to Ambient	$R_{\Theta JA}$	833	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{stg}	-55～+150	℃

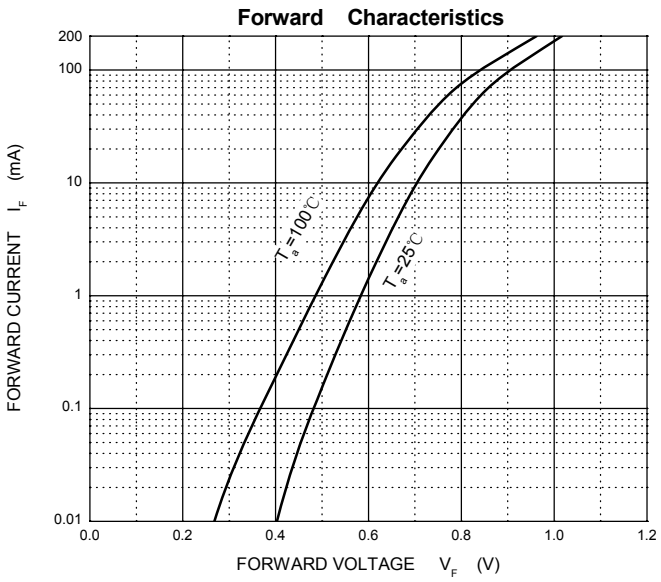
• ELECTRICAL CHARACTERISTICS (T_a=25℃)

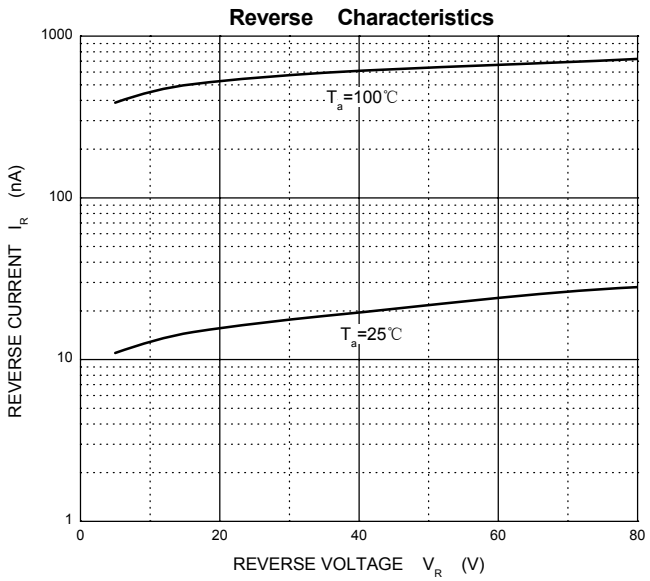
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=1μA	75			V
Reverse current	I_R	V_R=75V			1	μA
		V_R=20V			25	nA
Forward voltage	V_F	I_F=1mA			0.715	V
		I_F=10mA			0.855	V
		I_F=50mA			1	V
		I_F=150mA			1.25	V
Total capacitance	C_{tot}	V_R=0V,f=1MHz			2	pF
Reverse recovery time	t_{rr}	I_F= I_R =10mA, I_{rr}=0.1*I_R,R_L=100Ω			4	ns

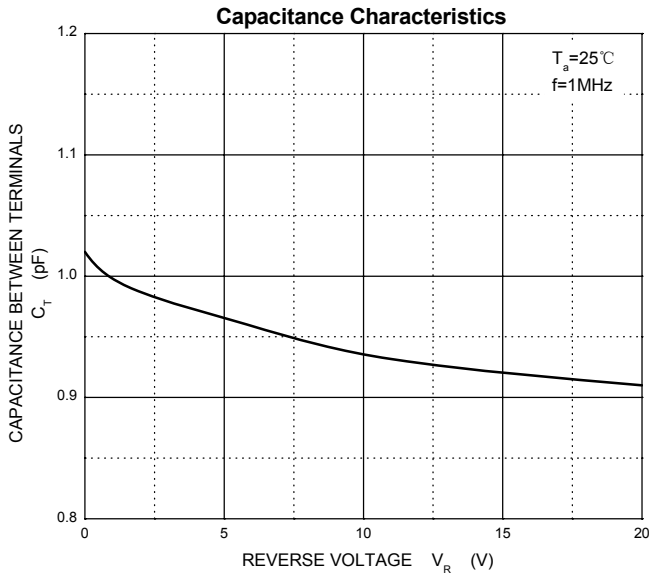
●Ordering Information:

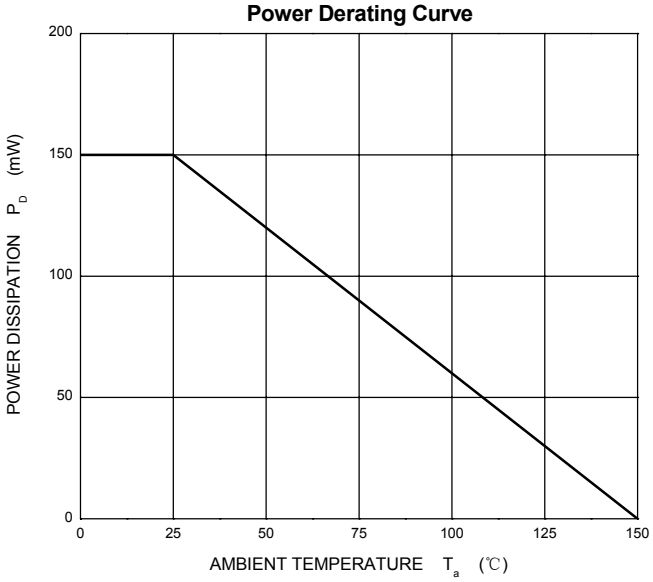
Part NO.	1N4148WT
Marking	T4
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

● Typical Characteristics

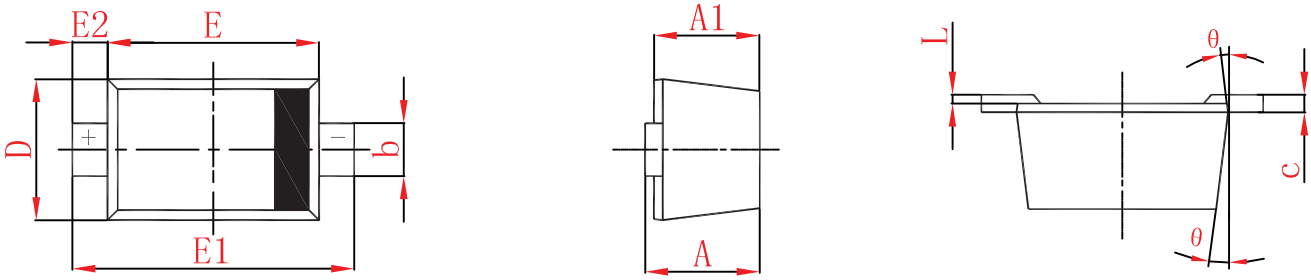


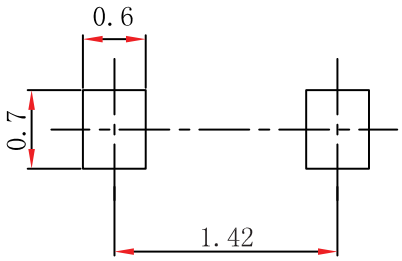






SOD-523 Package Outline Dimensions





Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

Sym ol	imensions In Millimeters		imensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	