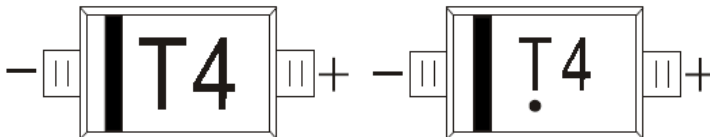


## 1N4148WT FAST SWITCHING DIODE

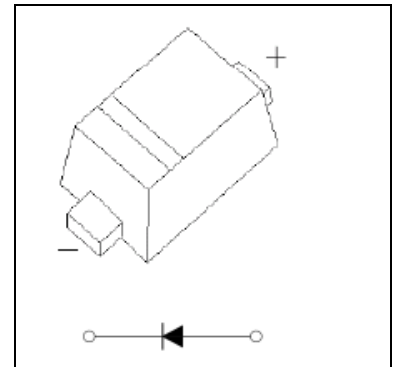
### Features:

- Low Forward Voltage Drop
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

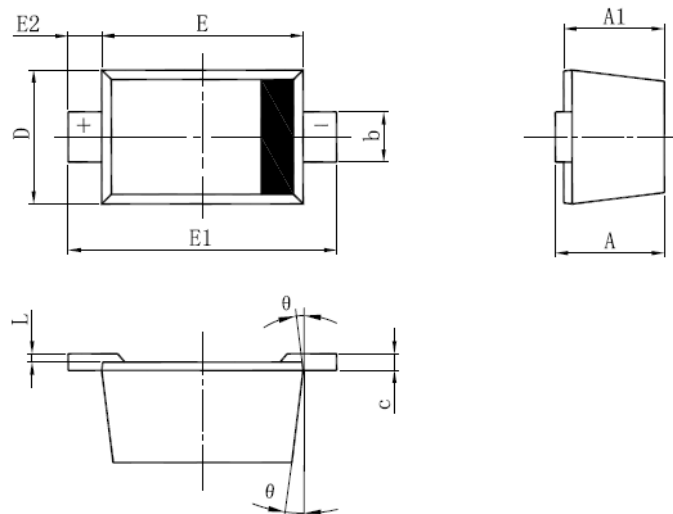
### Marking: T4



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



### Mechanical Dimensions: In mm/Inches



Symbol	Dimensions In Millimeters		Dimensions 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
$\theta$	7° REF		7° REF	

### SOD-523

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •

**Ordering Information:**

Device	Package	Shipping
1N4148WT	SOD-523(Pb-Free)	8000pcs / reel

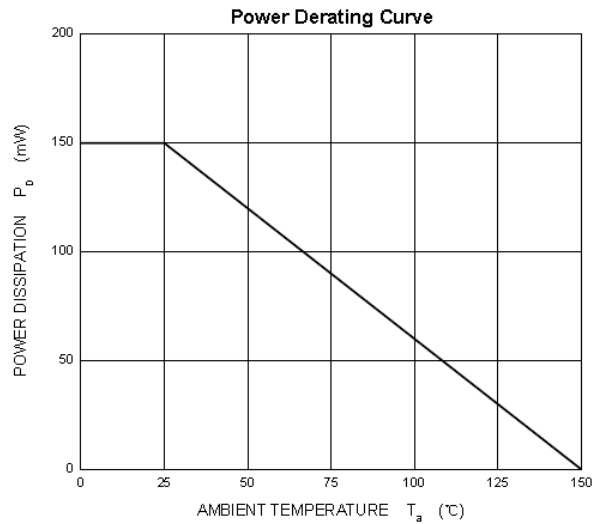
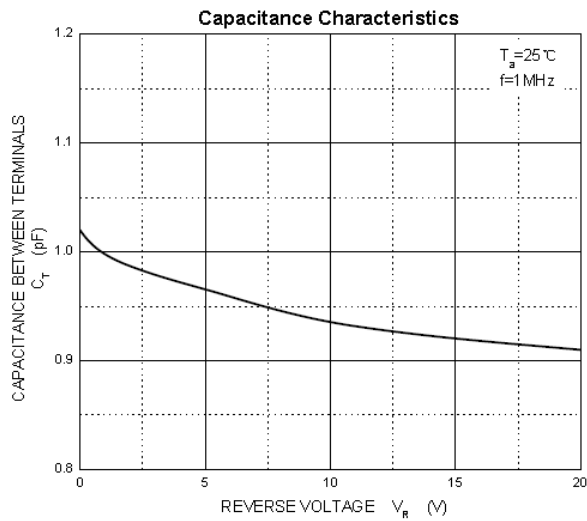
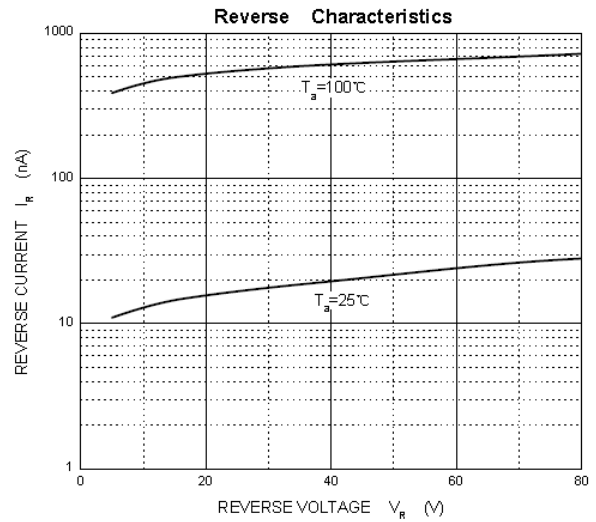
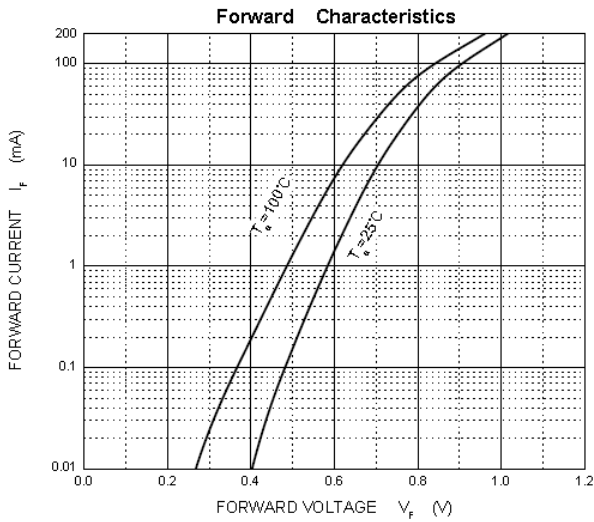
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

**Maximum Ratings @ $T_A=25^{\circ}\text{C}$  unless otherwise specified**

Symbol	Parameter	Value	Unit
$V_{RM}$	Non-repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	75	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
$I_O$	Average Rectified Output Current	0.15	A
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	300	mA
$P_D$	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	833	$^{\circ}\text{C}/\text{W}$
$T_j$	Junction Temperature	150	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature	-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	$V_{(BR)}$	$I_R=1\mu\text{A}$	75	-	-	V
Reverse current	$I_R$	$V_R=75\text{V}$	-	-	1	$\mu\text{A}$
		$V_R=20\text{V}$	-	-	25	$\mu\text{A}$
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	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$	-	-	2	pF
Reverse recovery time	$T_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1\times I_R, R_L=100\Omega$	-	-	4	ns



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