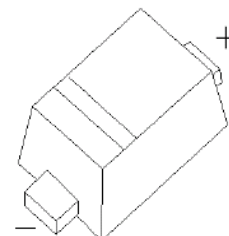




## SOD-523 Plastic-Encapsulate Diodes

**1N4148WT** FAST SWITCHING DIODE

SOD-523



### FEATURES

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

**MARKING:T4**

### MAXIMUM RATINGS ( $T_a=25^{\circ}\text{C}$ unless otherwise noted )

Symbol	Parameter	Value	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_R$	Reverse Voltage	75	V
$V_{RRM}$	Peak Repetitive Reverse Voltage		
$V_{RWM}$	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
$I_O$	Average Rectified Output Current	125	mA
$I_{FM}$	Forward Continuous Current	250	mA
$I_{FSM}$	Peak Forward Surge Current@1 $\mu$ s	2	A
	Peak Forward Surge Current@1s	1	A
$P_D$	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	nA
Forward voltage	$V_F$	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1	V
		$I_F=150\text{mA}$			1.25	V
Total capacitance	$C_{tot}$	$V_R=0\text{V}, f=1\text{MHz}$			2	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$			4	ns