

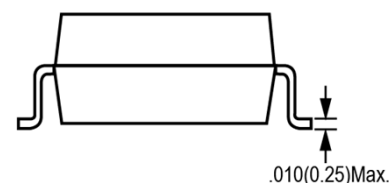
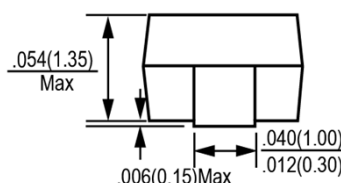
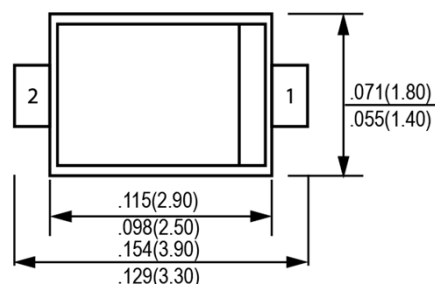


**FEATURES**

- ◆Fast Switching Speed
- ◆Surface Mount Package Ideally Suited for Automatic Insertion
- ◆For General Purpose Switching Applications
- ◆High Conductance
- ◆AEC-Q101 qualified
- ◆Marking : T4

SOD-123

Unit:inch(mm)



**MECHANICAL DATA**

- ◆Case : Molded plastic, SOD-123
- ◆Polarity : As Above Marked
- ◆Terminals : Plated terminals, solderable per MIL-STD-750 Method 2026
- ◆Moisture Sensitivity Level 1

**MAXIMUM RATINGS @ (TA= 25°C UNLESS OTHERWISE NOTED)**

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	75	V
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_O$	150	mA
Peak Forward Surge Current	$I_{FSM}$	2.0	A
		1.0	
Power Dissipation	$P_D$	350	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	357	°C/W
Operating Junction Temperature	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55~+150	°C

# DEVICE CHARACTERISTICS

## 1N4148W-A

### ELECTRICAL CHARACTERISTICS @ (TA = 25°C UNLESS OTHERWISE NOTED)

Parameter	Test conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F = 10\text{mA}$	$V_F$	—	—	0.855	V
	$I_F = 50\text{mA}$		—	—	1.00	
	$I_F = 150\text{mA}$		—	—	1.25	
Maximum Peak Reverse Current	$V_R = 75\text{V}$	$I_{RM}$	—	—	2.5	$\mu\text{A}$
	$V_R = 20\text{V}$		—	—	25	nA
Junction Capacitance	$V_R = 0, f = 1\text{MHz}$	$C_J$	—	—	2.0	pF
Reverse Recovery Time	$I_F = 10\text{mA}, I_R = 1\text{mA}$	$t_{rr}$	—	—	4.0	ns
	$V_R = 6\text{V}, R_L = 100\Omega$					

### RATING AND CHARACTERISTICS CURVES

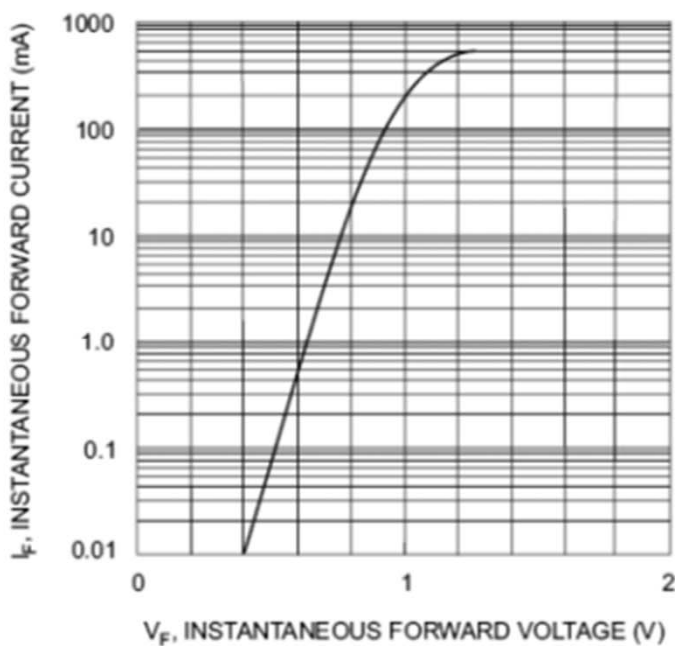


Fig. 1 Forward Characteristics

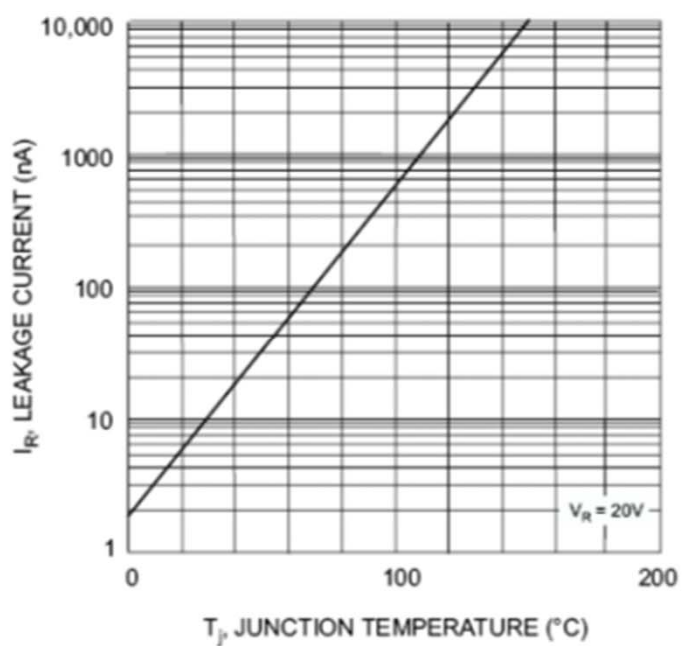


Fig. 2 Leakage Current vs Junction Temperature