



FEATURES

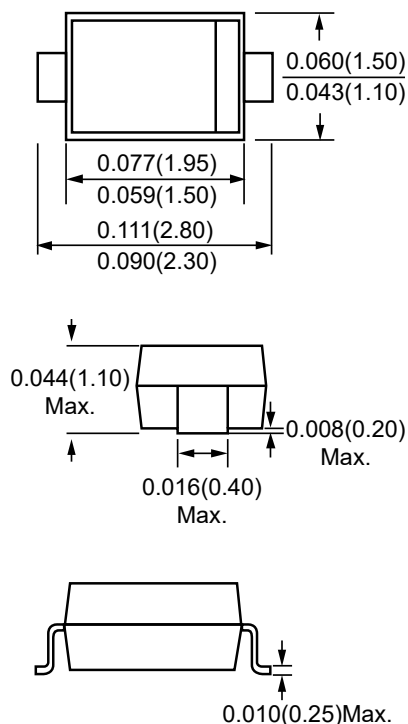
- ◆Fast Switching Speed
- ◆Surface Mount Package Ideally Suited for Automatic Insertion
- ◆For General Purpose Switching Applications
- ◆High Conductance
- ◆AEC-Q101 qualified
- ◆Marking : T4

MECHANICAL DATA

- ◆Case : Molded plastic, SOD-323
- ◆Polarity : As Above Marked
- ◆Terminals : Plated terminals, solderable per MIL-STD-750 Method 2026
- ◆Moisture Sensitivity Level 1

SOD-323

Unit:inch(mm)



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	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	625	°C/W
Operating/Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

DEVICE CHARACTERISTICS

1N4148WS-A

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

Parameter	Test conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100\mu\text{A}$	$V_{(BR)R}$	75	—	—	V
Forward Voltage	$I_F = 1.0\text{mA}$	V_F	—	—	0.715	V
	$I_F = 10\text{mA}$		—	—	0.855	
	$I_F = 50\text{mA}$		—	—	1.00	
	$I_F = 150\text{mA}$		—	—	1.25	
Reverse Current	$V_R = 75\text{V}$	I_R	—	—	1.0	μA
	$V_R = 20\text{V}$		—	—	25	nA
Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J	—	—	2.0	pF
Reverse Recovery Time	$I_F = I_R = 10\text{mA}$, $I_{tr} = 0.1X I_R$, $R_L = 100\Omega$	t_{rr}	—	—	4.0	ns

RATING AND CHARACTERISTICS CURVES

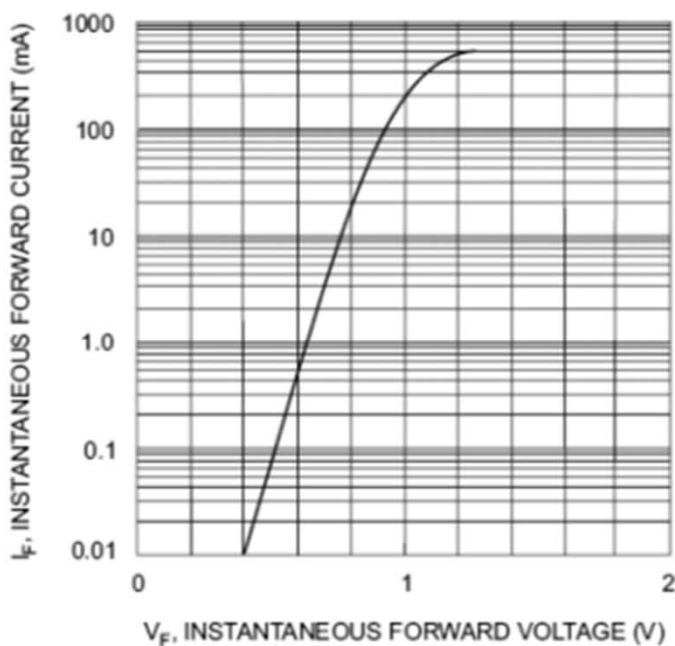


Fig. 1 Forward Characteristics

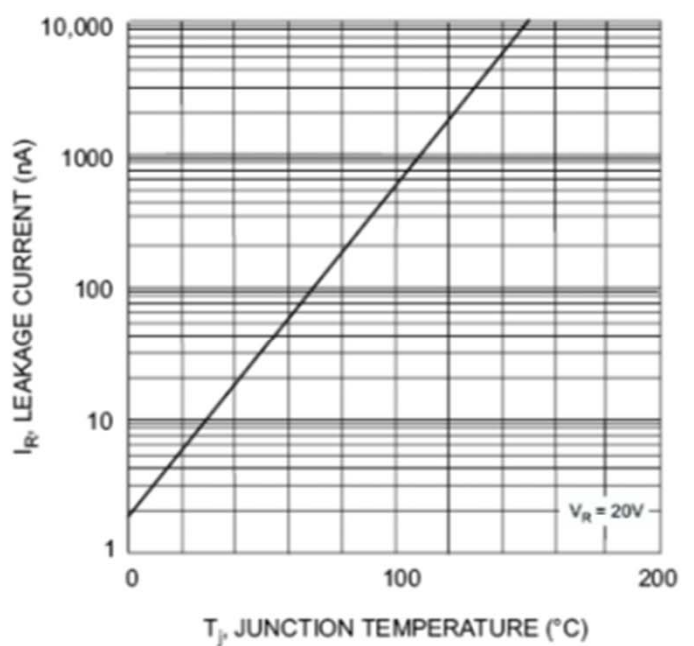


Fig. 2 Leakage Current vs Junction Temperature