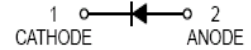
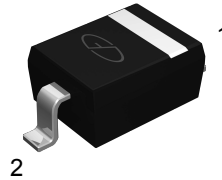


## Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



Package: SOD-323

Schematic Diagram

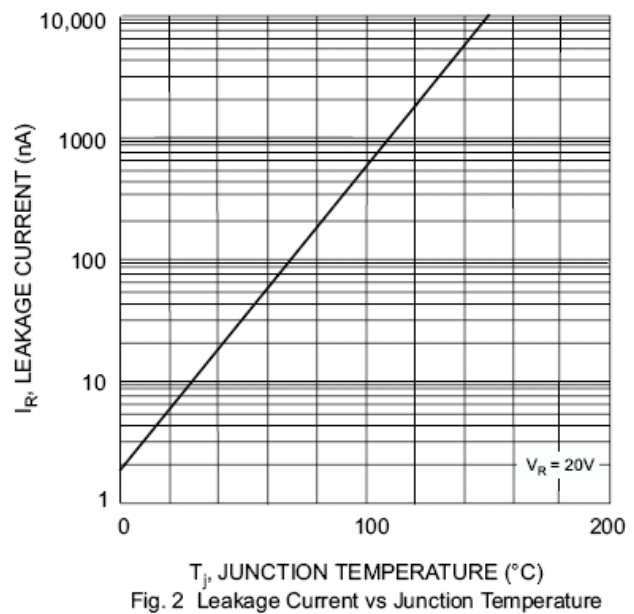
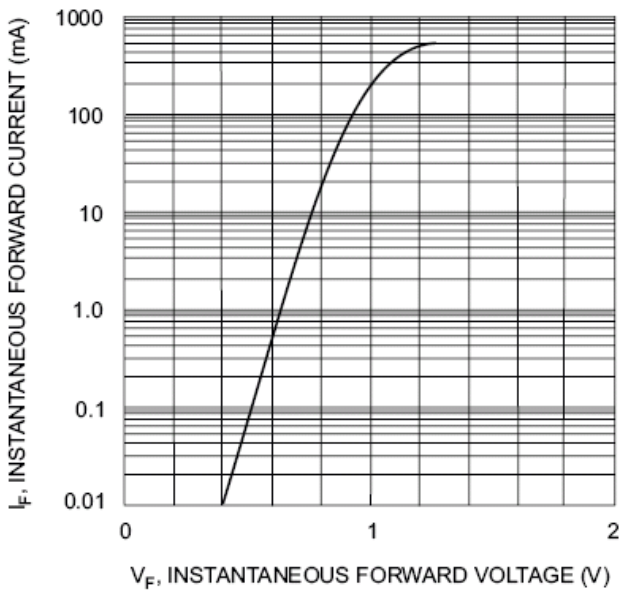
## Absolute Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	75	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>o</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	I <sub>FSM</sub>	2.0 1.0	A
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient Air	R <sub>θJA</sub>	625	°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

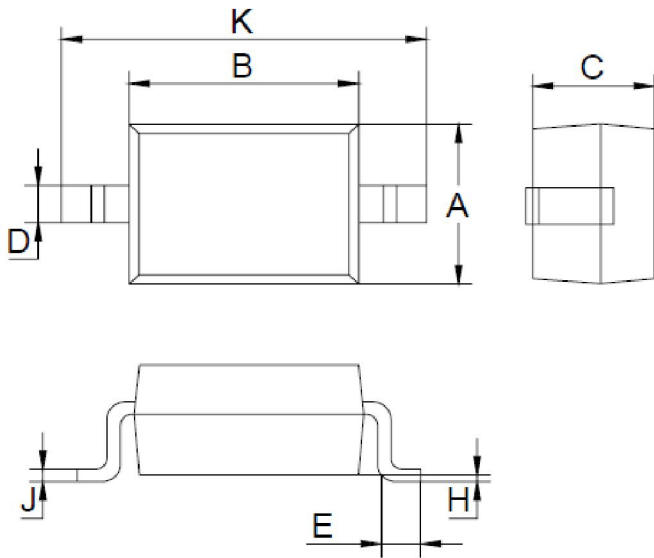
**Electrical Characteristics** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

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

**Typical Electrical Characteristic Curves**



**Package Outline Dimensions**    SOD-323



SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7
All Dimensions in mm		

**Marking and Ordering Information**

Device	Package	Carrier	Quantity	Marking
1N4148WS	SOD-323	Tape & Reel	3,000pcs / Reel	T4