

Surface Mount Switching Diode

(Pb) Lead(Pb)-Free

Features:

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

Mechanical Data:

- * Case: SOD-323, Molded Plastic
- * Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.004 grams (approx)

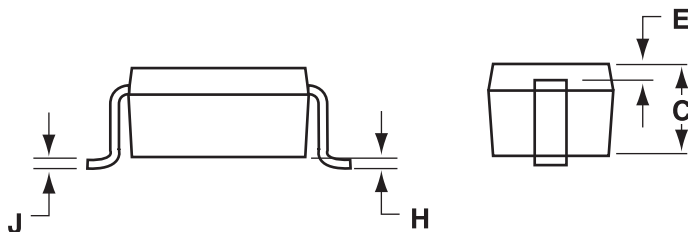
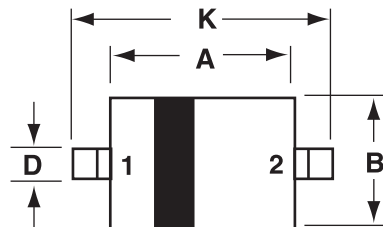
SWITCHING DIODE
150m AMPERES
100 VOLTS



SOD-323

SOD-323 Outline Dimensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
A	1.60	1.80
B	1.15	1.35
C	0.80	1.00
D	0.25	0.40
E	0.15 REF	
H	0.00	0.10
J	0.089	0.377
K	2.30	2.70

PIN 1. CATHODE
2. ANODE

Maximum Ratings (TA=25°C Unless Otherwise note)

Rating	Symbol	Value	Unit
Reverse Voltage Nop-Reptitive Peak	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Vlotage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Recfified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t=1.0μs @ t=1.0s	I_{FSM}	2.0 1.0	A

Thermal Characteristics

Characterictics	Symbol	Max	Unit
Total Device Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	K/W
Junction and Storage Temperature	T_J	+ 150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics (TA=25°C Unless Otherwise note)

Characterictics	Symbol	Min	Max	Unit
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Off Characteristics

Forward Voltage $I_F=1.0mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$	V_F	—	0.715 0.855 1.00 1.25	V
Reverse Voltage Leakage Current $V_R=75V$ $V_R=20V$	I_R	— —	1.0 25	μA nA
Diode Capacitance $V_R=0$, $f=1.0MHz$	C_T	—	2.0	pF
Reverse Recover Time $I_F=I_R=10mA$, $I_{rr}=0.1 \times I_R$, $R_L=100\Omega$	t_{rr}	—	4.0	ns

Device Marking

Item	Marking	Equivalent Circuitdiagram
1N4148WS	5D	

Typical Characteristics

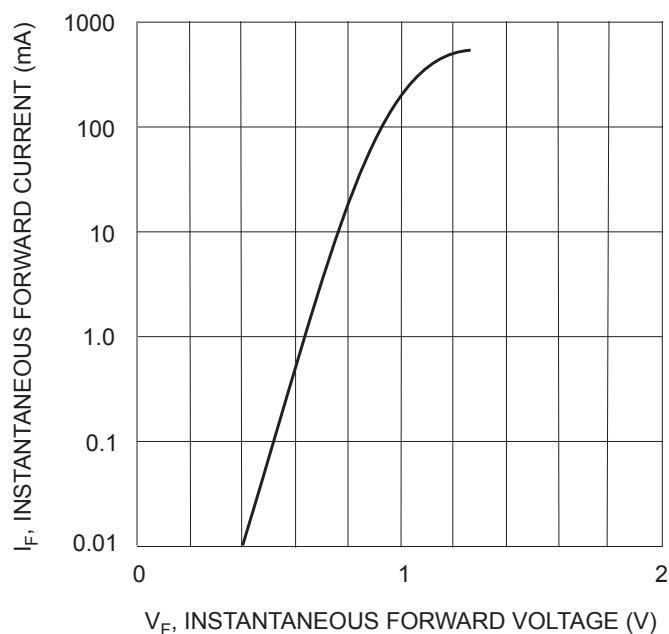


Fig.1 Forward Characteristics

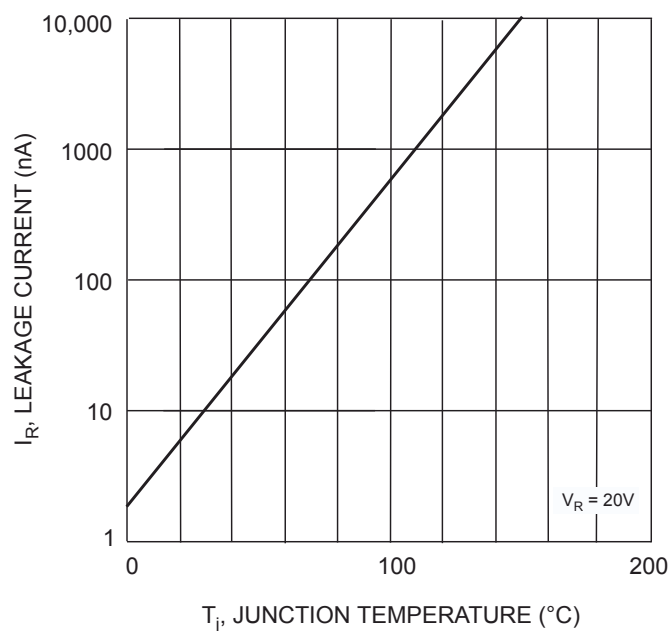


Fig.2 Leakage Current vs Junction Temperature