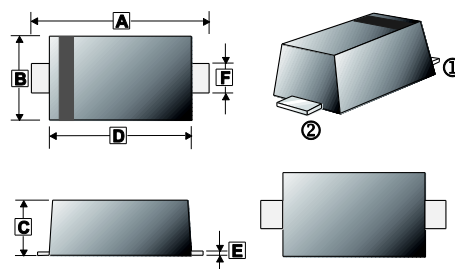


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

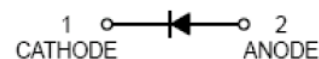
## FEATURES

- Fast Switching Device ( $T_{RR} < 4\text{nS}$ )
- General Purpose Diodes
- Flat Lead SOD-123 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

## SOD-123LH



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	3.30	3.70	D	2.50	2.70
B	1.50	1.70	E	0.05	0.20
C	0.80	1.00	F	0.50	0.70



## MARKING

D1

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-123LH	3K	7 inch

## ORDER INFORMATION

Part Number	Type
1N4148LW-C	Lead (Pb)-free and Halogen-free

## ABSOLUTE MAXIMUM RATINGS (at $T_A=25^\circ\text{C}$ unless otherwise specified.)

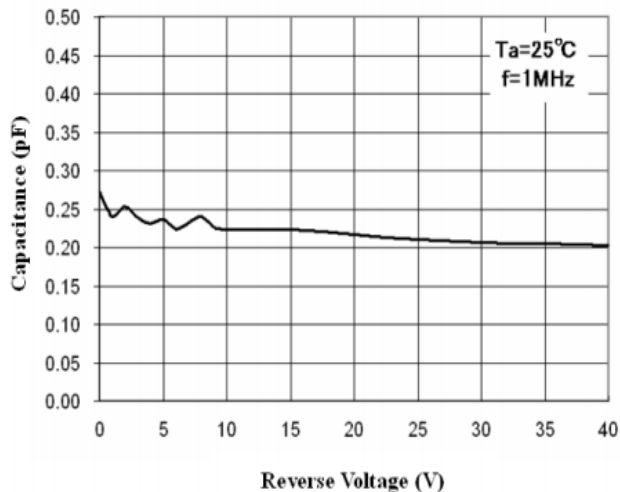
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	100	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	75	V
Repetitive Peak Forward Current	$I_{FRM}$	300	mA
Peak Forward Surge Current	$I_{FSM}$	2	A
Continuous Forward Current	$I_O$	150	mA
Power Dissipation	$P_D$	400	mW
Operating Temperature, Storage Temperature	$T_J, T_{STG}$	150, -65~150	$^\circ\text{C}$

## ELECTRICAL CHARACTERISTICS (at $T_A=25^\circ\text{C}$ unless otherwise specified)

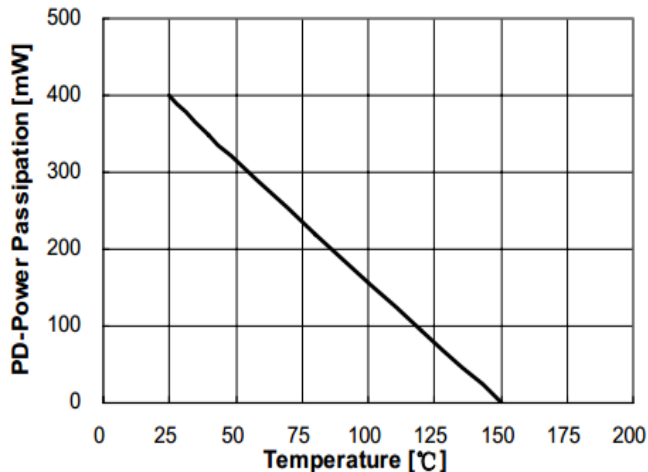
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Breakdown Voltage	$B_V$	100	-	-	V	$I_R=100\mu\text{A}$
		75	-	-		$I_R=5\mu\text{A}$
Forward Voltage	$V_F$	-	-	1.0	V	$I_F=10\text{mA}$
Reverse Leakage Current	$I_R$	-	-	25	nA	$V_R=20\text{V}$
		-	-	5	$\mu\text{A}$	$V_R=75\text{V}$
Capacitance	$C$	-	4	-	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse Recovery Time	$T_{RR}$	-	4	-	nS	$I_F=10\text{mA}, I_R=60\text{mA}, I_{RR}=1\text{mA}, R_L=100\Omega$

**RATINGS AND CHARACTERISTIC CURVES**

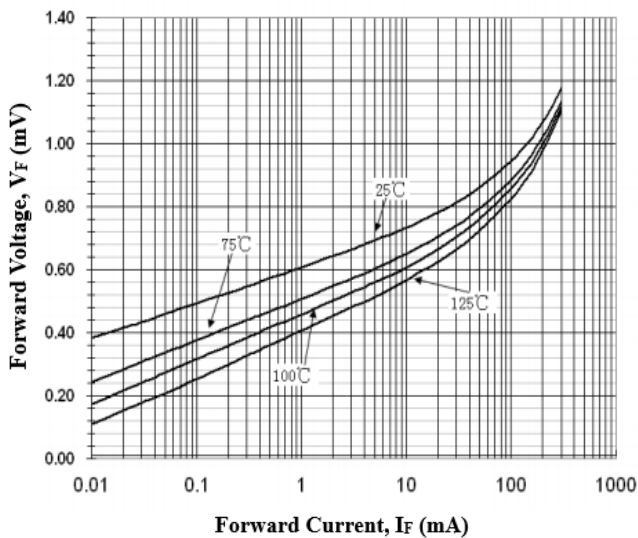
**Total Capacitance**



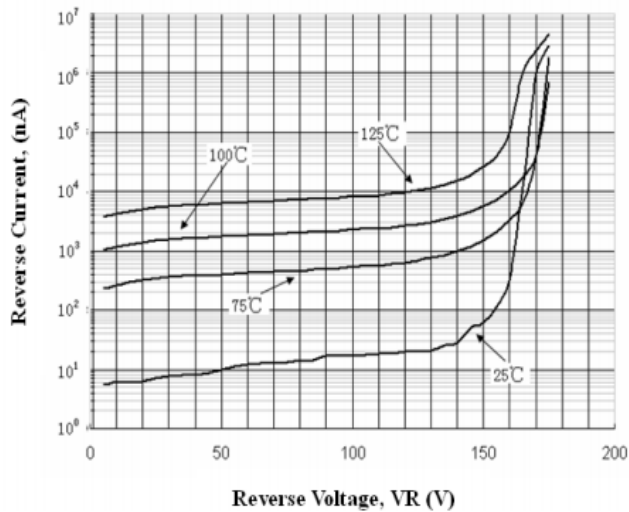
**Power Derating Curve**



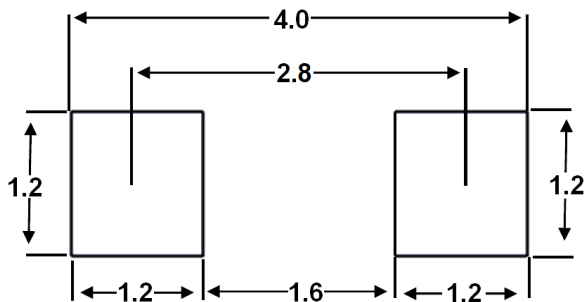
**Forward Voltage vs Ambient Temperature**



**Reverse Current vs Reverse Voltage**



**Mounting Pad Layout**



\*Dimensions in millimeters