



Micro Commercial Components

Micro Commercial Components  
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**1N4148X**

**200mW  
Switching Diodes**

## Features

- Halogen free available upon request by adding suffix "-HF"
- Fast Switching Speed
- For General Purpose Switching Applications
- Surface Mount Package Ideally Suited for Automatic Insertion
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

## Mechanical Data

- Marking Code: T4
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

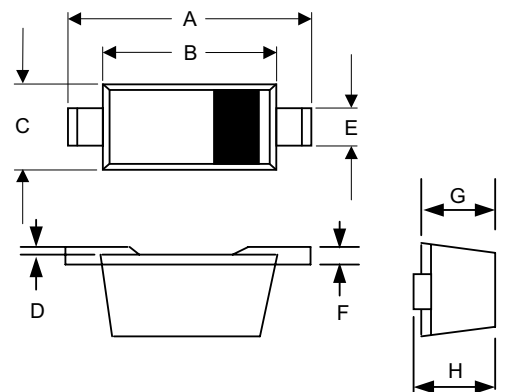
## Maximum Ratings

Symbol	Parameter	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	75	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_R$	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
$I_{FM}$	Forward Continuous Current	300	mA
$I_o$	Average Rectified Output Current	150	mA
$I_{FSM}$	Peak Forward Surge Current @1.0 $\mu$ s	2.0	A
		@1.0s	
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^{\circ}C/W$
$P_D$	Power dissipation	200	mW
$T_J, T_{STG}$	Operating and Storage Junction Temperature	-65 to +150	$^{\circ}C$

## Electrical Characteristics @ 25 $^{\circ}C$ Unless Otherwise Specified

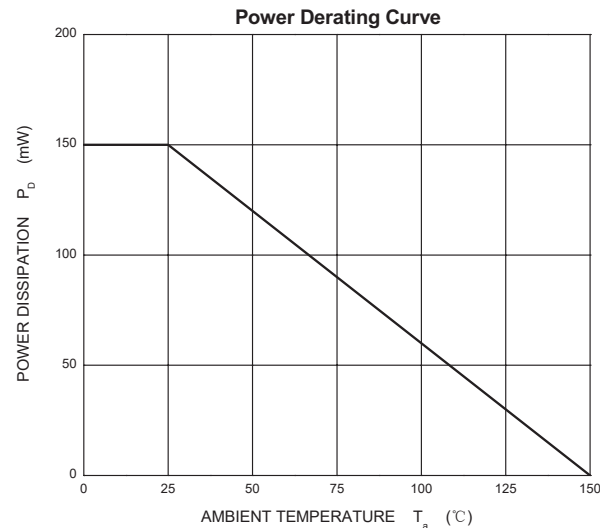
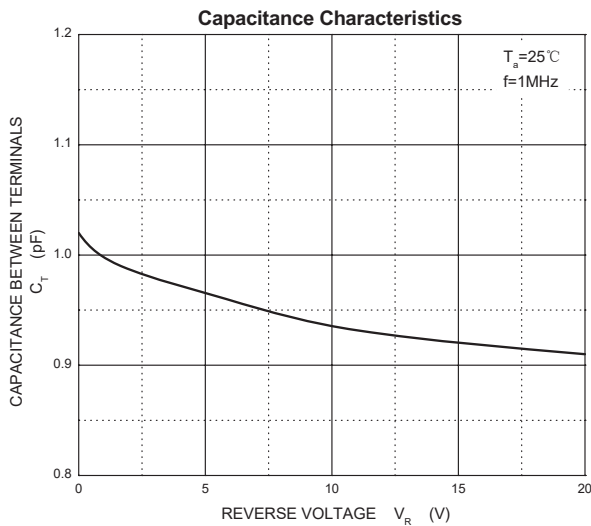
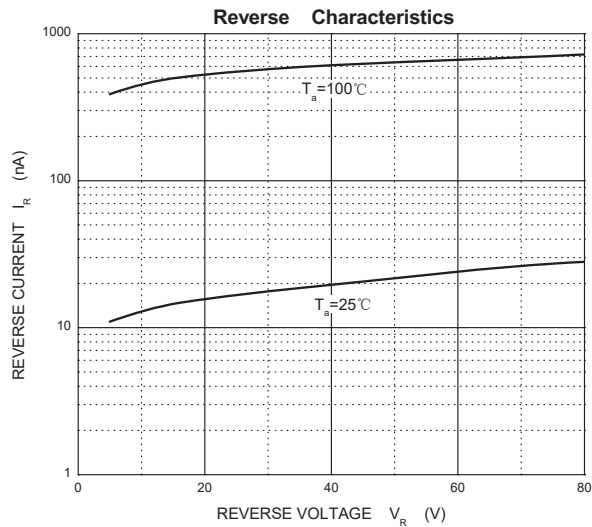
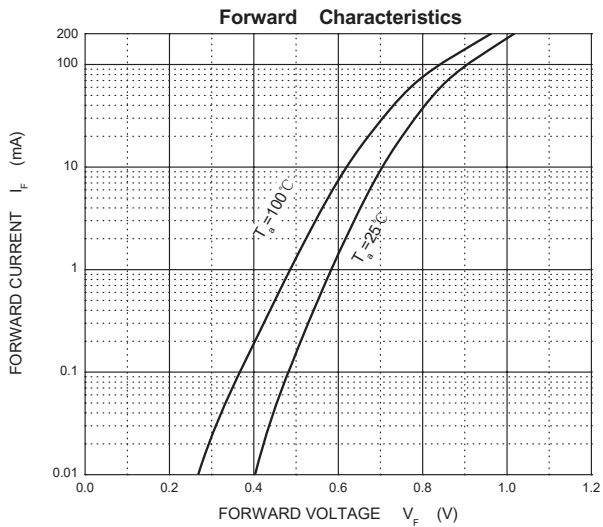
Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	75V	---	$I_R=10 \mu A$
$I_R$	Reverse Voltage Leakage Current	---	1.0 $\mu A$	$V_R=75V$
		---	25nA	$V_R=20V$
$V_F$	Forward Voltage	---	0.715V	$I_F=1mA$
		---	0.855V	$I_F=10mA$
		---	1.0V	$I_F=100mA$
$C_T$	Total Capacitance	---	1.25V	$I_F=150mA$
		---	2.0pF	$V_R=0V, f=1MHz$
$t_{rr}$	Reverse Recovery Time	---	4.0ns	$I_R=I_F=10mA, R_L=100 \Omega, Rec. to 1.0mA$

## SOD523

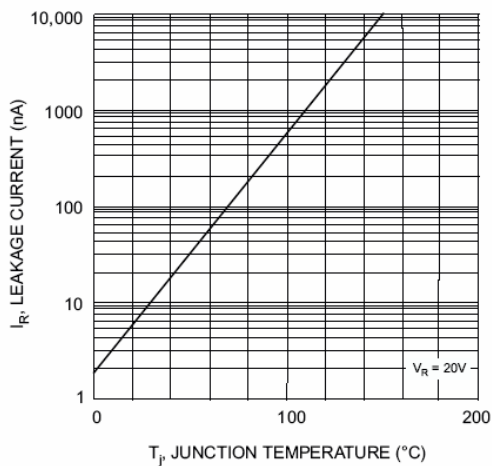


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.77	

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**Leakage Current vs Junction Temperature**





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## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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