

**Micro Commercial Components** 

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

### 1N4148X

## **Features**

- 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
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## **Maximum Ratings**

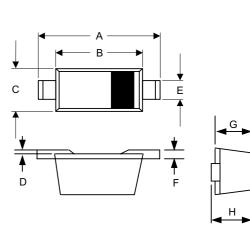
Symbol	Parameter	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	75	V
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I <sub>FM</sub>	Forward Continuous Current	300	mA
l <sub>o</sub>	Average Rectified Output Current	150	mA
I <sub>FSM</sub>	Peak Forward Surge Current @1.0 µ s @1.0s	2.0 1.0	Α
R <sub>⊕JA</sub>	Thermal Resistance Junction to Ambient	625	°C/W
P <sub>D</sub>	Power dissipation	200	mW
T <sub>J</sub> ,T <sub>STG</sub>	Operating and Storage Junction Temperature	-65 to +150	$^{\circ}\!\mathbb{C}$

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	75V		I <sub>R</sub> =10 μ A
I <sub>R</sub>	Reverse Voltage Leakage Current		1.0 µ A 25nA	$V_R$ =75V $V_R$ =20V
$V_{F}$	Forward Voltage	  	0.715V 0.855V 1.0V 1.25V	I <sub>F</sub> =5mA I <sub>F</sub> =10mA I <sub>F</sub> =100mA I <sub>F</sub> =150mA
C <sub>T</sub>	Total Capacitance		2.0pF	V <sub>R</sub> =0V, f=1MHZ
t <sub>rr</sub>	Reverse Recovery Time		4.0ns	$I_R=I_F=10$ mA, $R_L=100$ $\Omega$ , Rec. to 1.0mA

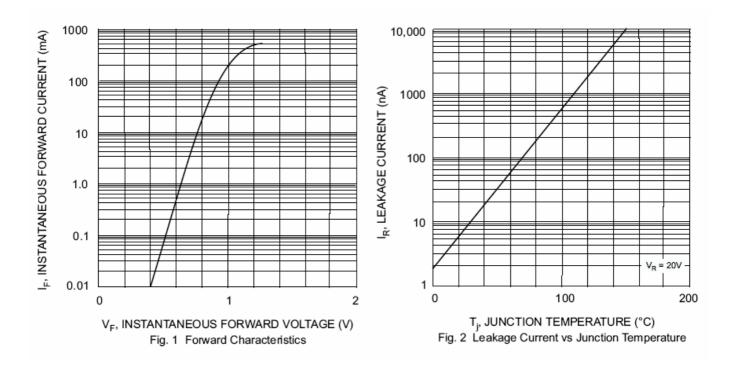
## 200mW **Switching Diodes**

# **SOD523**



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.059	.067	1.50	1.70	
В	.043	.051	1.10	1.30	
С	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
Е	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
Н	020	.031	0.51	0.77	







### **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

### \*\*\*IMPORTANT NOTICE\*\*\*

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.
Micro Commercial Components Corp. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp. and all the companies whose products are represented on our website, harmless against all damages.

#### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical,

Aerospace or Military Applications.