

Product Catalog > [Diodes](#) > [Switching Diodes](#) >

Part Number	1N4148W
product family	SWITCHING DIODES
package type	SOD-123
VRM(PRV)	100V
Ifsm	1A
IF(AV)	150mA
@Vf	0.715V
@If	1.0mA
Trr	4.0nS
IR	50μA
@VR	75V
Package Qty	Tape : 3K/Reel , 120K/Ctn;
<p>This product is listed under the following categories where you may find similar products:</p> <p><a href="#">Diodes</a></p> <p><a href="#">Switching Diodes</a></p>	

Product Catalog > [Diodes](#) > [Switching Diodes](#) >

Part Number	1N4148W
product family	SWITCHING DIODES
package type	SOD-123
VRM(PRV)	100V
Ifsm	1A
IF(AV)	150mA
@Vf	0.715V
@If	1.0mA
Trr	4.0nS
IR	50μA
@VR	75V
Package Qty	Tape : 3K/Reel , 120K/Ctn;

This product is listed under the following categories where you may find similar products:  
[Diodes](#)  
[Switching Diodes](#)



Micro Commercial Components

# 1N4148W

## High Speed Switching Diode 400mW

### Features

- Fast switching speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For general purpose switching applications
- High conductance
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

### Mechanical Data

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.01 grams (approx.)
- Marking Code: T4,A2

### Absolute maximum Ratings

Symbol	Parameter	Rating	Unit
$V_{RM}$	Peak Repetitive Reverse Voltage	100	V
$V_R$	DC Reverse Blocking Voltage	100	V
$V_{R(RMS)}$	RMS Reverse Voltage	71	V
$I_{FM}$	Peak Forward Current	300	mA
$I_O$	Average Rectified Output Current	150	mA
$I_{FSM}$	Forward Surge Current @1us	2	A
	@1s	1	
$P_D$	Power Dissipation	400	mW
$R_{\theta ja}$	Thermal Resistance Junction to Ambient	312.5	$^{\circ}C/W$
$T_J$	Operating Junction Temperature	-65 to +150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-65 to +150	$^{\circ}C$

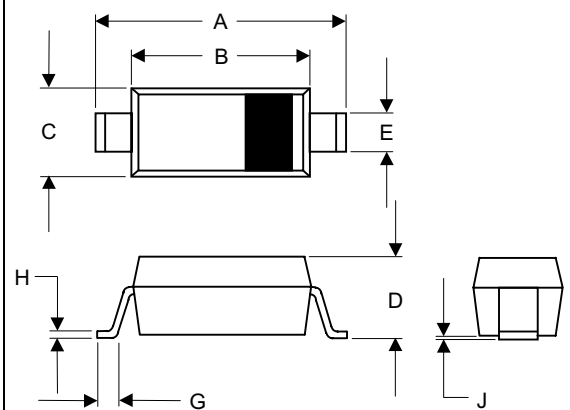
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
--------	-----------	-----	-----	-------

#### OFF CHARACTERISTICS

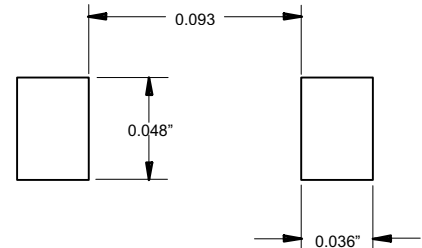
$V_F$	Forward Voltage Drop ( $I_F=1mA_{dc}$ )	---	0.715	Vdc
	( $I_F=10mA_{dc}$ )	---	0.855	
	( $I_F=50mA_{dc}$ )	---	1.00	
	( $I_F=150mA_{dc}$ )	---	1.25	
$I_R$	Reverse Current ( $V_R=75V_{dc}, T=25^{\circ}C$ )	---	1.0	uAdc
	( $V_R=20V_{dc}, T=25^{\circ}C$ )	---	0.025	
	( $V_R=75V_{dc}, T=150^{\circ}C$ )	---	50	
$C_T$	Total Capacitance ( $V_R=0V_{dc}, f=1.0MHz$ )	---	2.0	pF
$T_{rr}$	Reverse Recovery Time ( $I_{rr}=0.1 \cdot I_R, I_F=I_R 10mA_{dc}, R_L=100\Omega$ )	---	4.0	ns

### SOD123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.031	0.30	.78	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	

#### SUGGESTED SOLDER PAD LAYOUT





Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/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.