



# 1N4148W

## High Speed Switching Diode 400mW

### Features

- Halogen free available upon request by adding suffix "-HF"
- 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

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 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	$^{\circ}C$

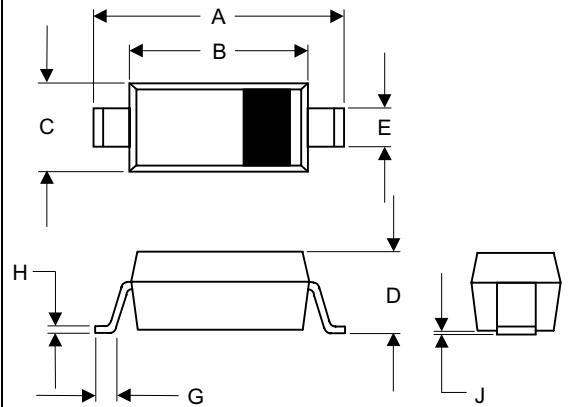
### Electrical Characteristics @ 25°C Unless Otherwise Specified

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

#### OFF CHARACTERISTICS

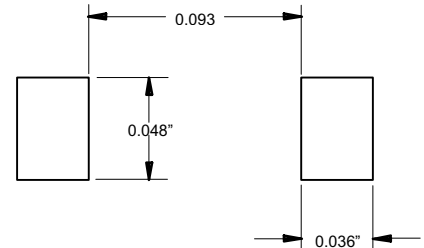
$V_F$	Forward Voltage Drop ( $I_F=1mA_{dc}$ )	---	0.715	Vdc
	( $I_F=10mA_{dc}$ )	---	0.855	
	( $I_F=50mA_{dc}$ )	---	1.00	
	( $I_F=150mA_{dc}$ )	---	1.25	
$I_R$	Reverse Current ( $V_R=75V_{dc}, T=25^{\circ}C$ )	---	1.0	uAdc
	( $V_R=20V_{dc}, T=25^{\circ}C$ )	---	0.025	
	( $V_R=75V_{dc}, T=150^{\circ}C$ )	---	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



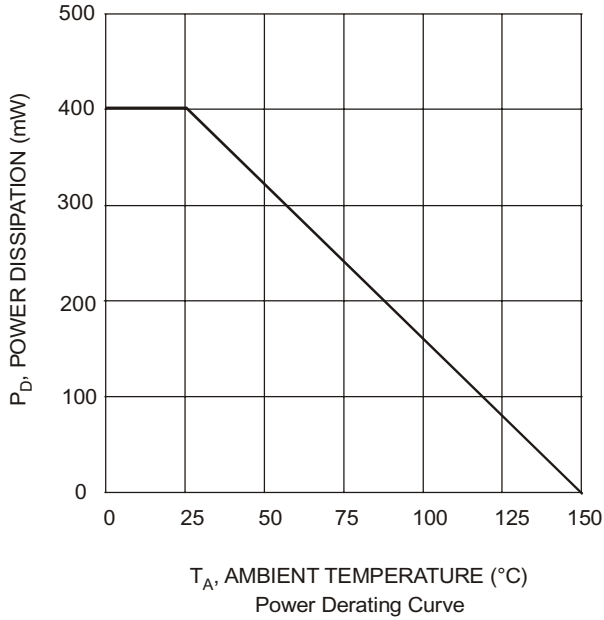
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.026	0.30	.66	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	

#### SUGGESTED SOLDER PAD LAYOUT

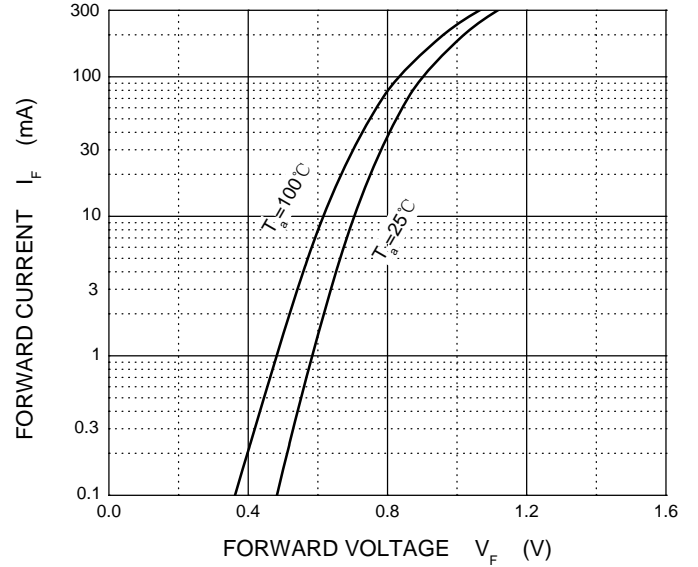


# 1N4148W

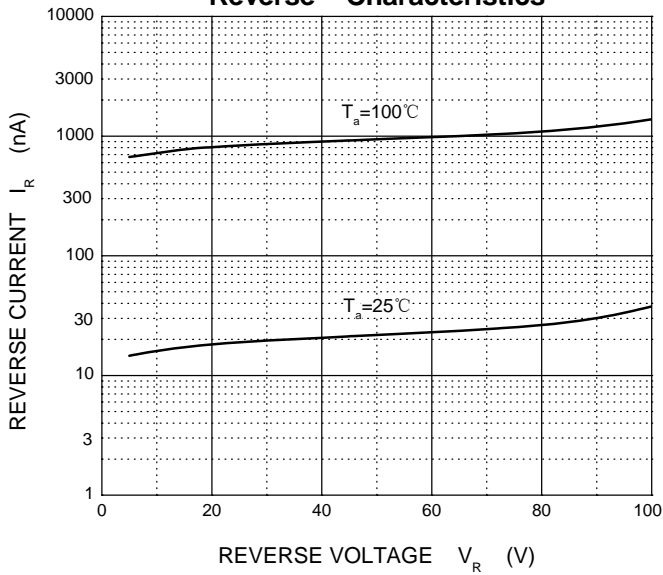
**Power Derating Curve**



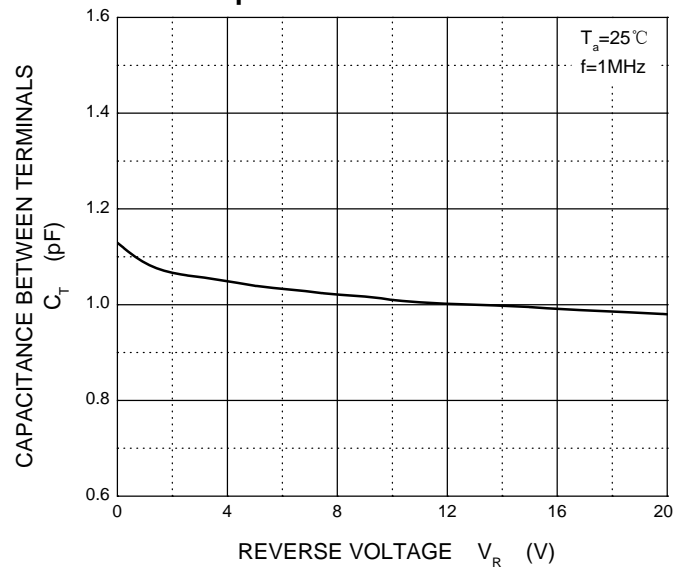
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**





Micro Commercial Components

## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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

### \*\*\*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.

### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

[www.mccsemi.com](http://www.mccsemi.com)

单击下面可查看定价，库存，交付和生命周期等信息

[>>MCC](#)