



**THE DATASHEET OF  
1N4448-TP**





Micro Commercial Components



Micro Commercial Components  
20736 Marilla Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

1N4448

500mW 100Volt  
Switching Diode

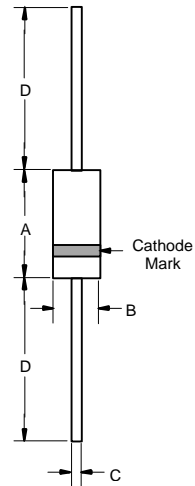
### Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Low Current Leakage
- Metalurgically Bonded Construction
- Low Cost
- Marking : Cathode band and type number
- Moisture Sensitivity Level 1

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 35°C/W Junction To Ambient

DO-35



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

Reverse Voltage	$V_R$	75V	
Peak Reverse Voltage	$V_{RM}$	100V	
Average Rectified Current	$I_O$	150mA	Resistive Load $f \geq 50\text{Hz}$
Power Dissipation	$P_{TOT}$	500mW	
Junction Temperature	$T_J$	150°C	
Peak Forward Surge Current	$I_{FSM}$	500mA	$t < 1\text{s}$
Instantaneous Forward Voltage	$V_F$	1.0V(MAX) 0.62-0.72V	$I_{FM} = 100\text{mA};$ $I_{FM} = 5.0\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	25nA 50µA 5µA	$V_R = 20\text{Volts}$ $T_J = 25^\circ\text{C}$ $T_J = 150^\circ\text{C}$ $V_R = 75\text{Volts}$
Typical Junction Capacitance	$C_J$	4pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$
Reverse Recovery Time	$T_{rr}$	4nS	$I_F = 10\text{mA}$ $V_R = 6\text{V}$ $R_L = 100\Omega$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

\*Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

Figure 1  
Typical Forward Characteristics

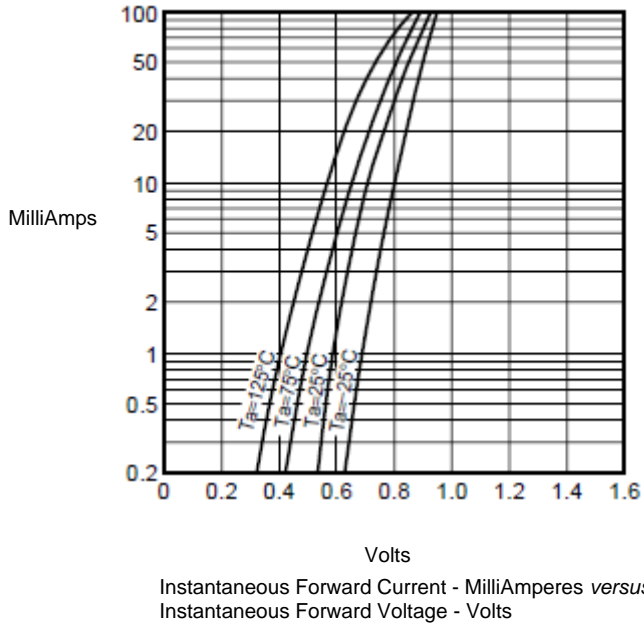


Figure 2  
Forward Derating Curve

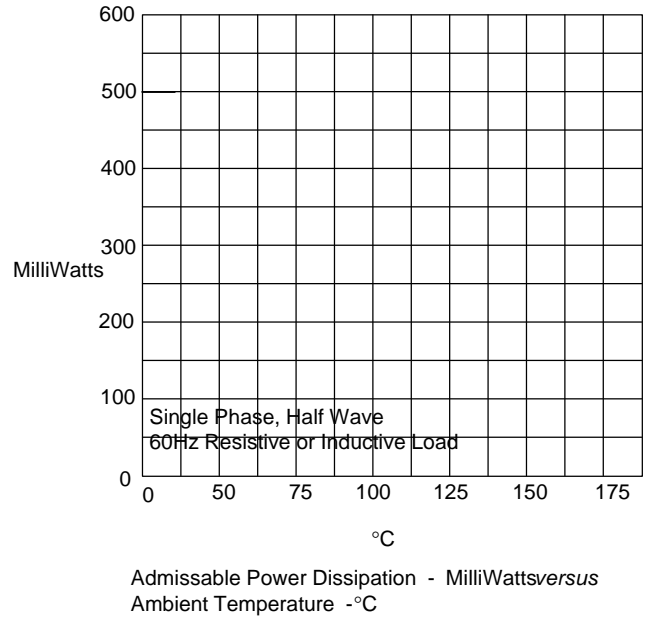
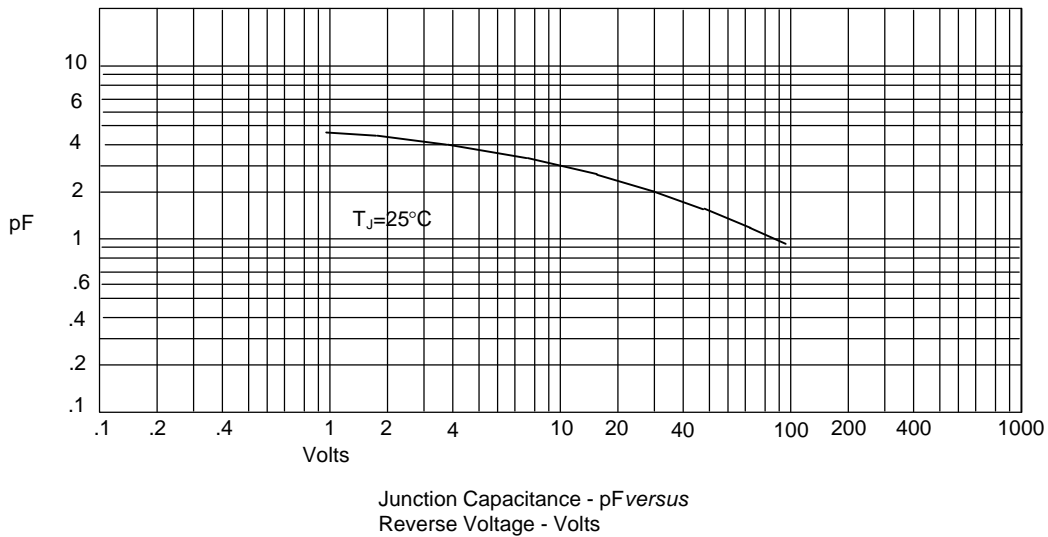


Figure 3  
Junction Capacitance



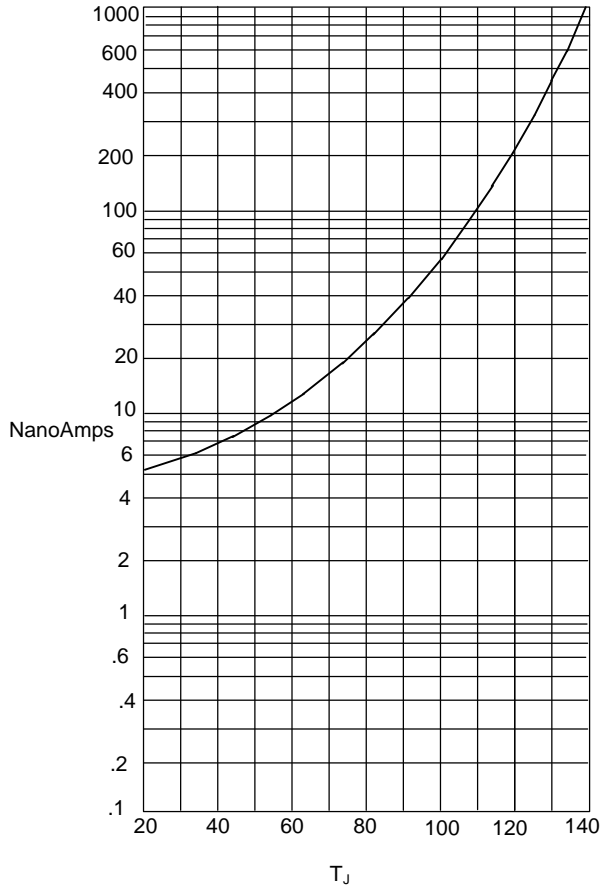
# 1N4448



TM

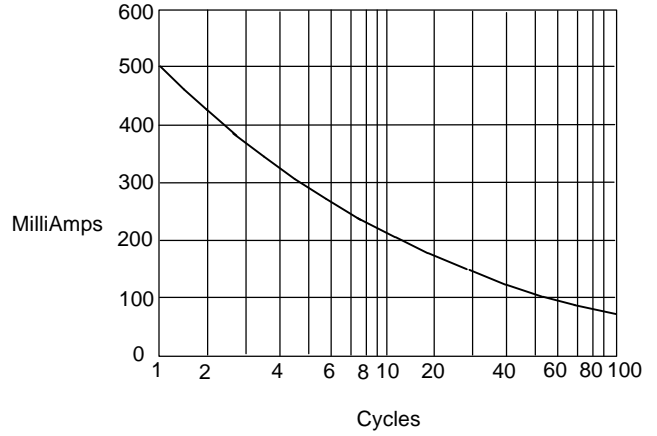
Micro Commercial Components

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - NanoAmperes versus  
Junction Temperature - °C

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles



Micro Commercial Components

### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

**\*\*\*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.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 1N4448-TP on WIN SOURCE](#)
-  [Micro Commercial Co Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management