



Micro Commercial Components



Micro Commercial Components  
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## 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

## 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	$I_F = 10\text{mA}$ $V_R = 6\text{V}$ $R_L = 100\Omega$

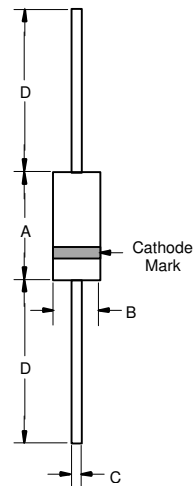
\*Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

1N4448

500mW 100Volt  
Switching Diode

DO-35



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	---	

Figure 1  
Typical Forward Characteristics

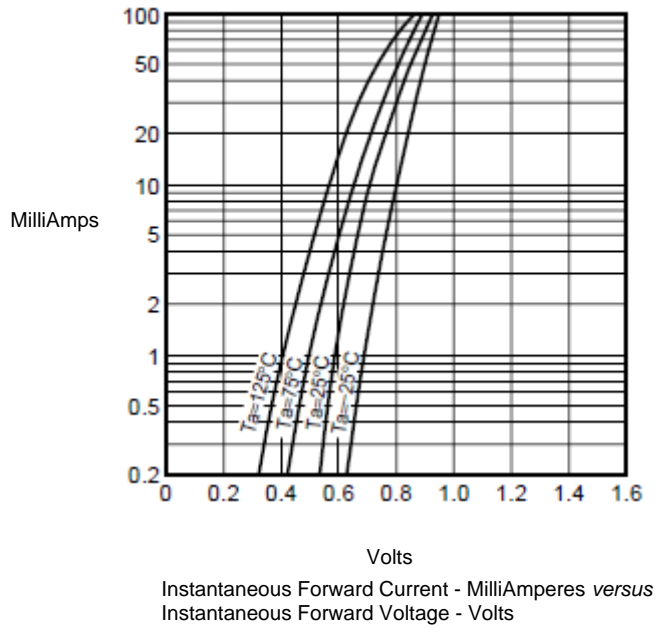


Figure 2  
Forward Derating Curve

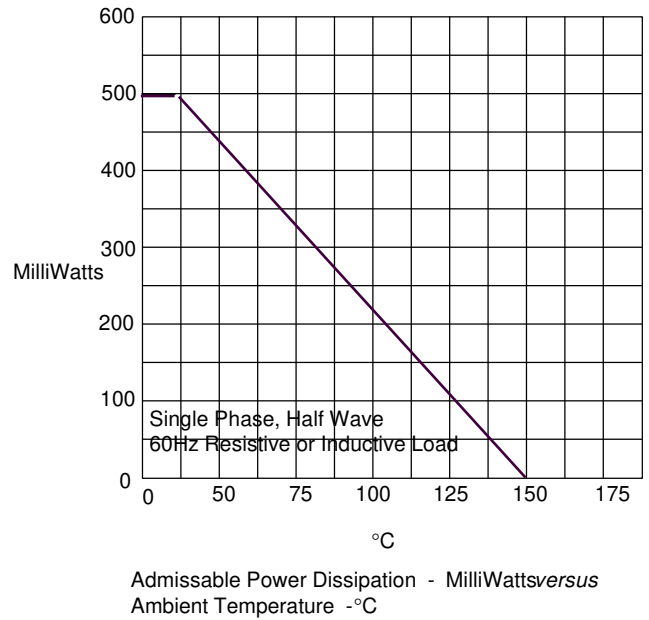
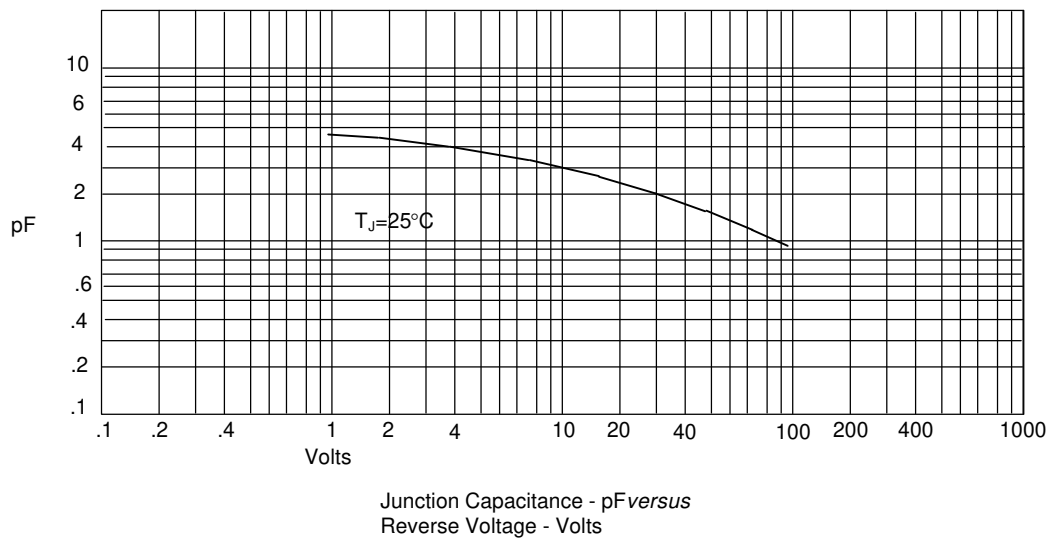
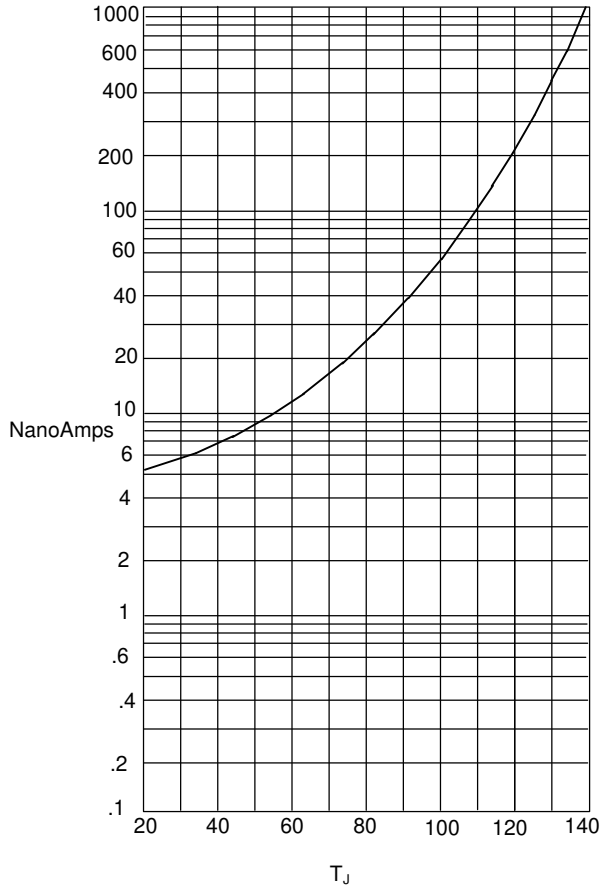


Figure 3  
Junction Capacitance



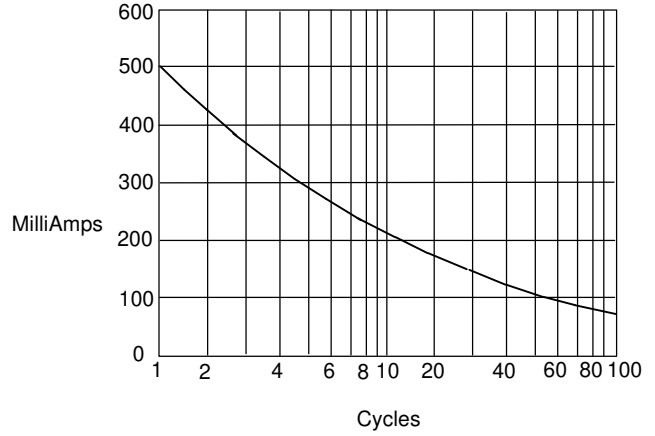
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Figure 4  
Typical Reverse Characteristics



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



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### 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

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