Micro Commercial Components
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1N4448W

500mW 100 Volts Switching Diode

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: T5
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Maximum Ratings

Maximum Ratings @ 25°C Unless Otherwise Specified

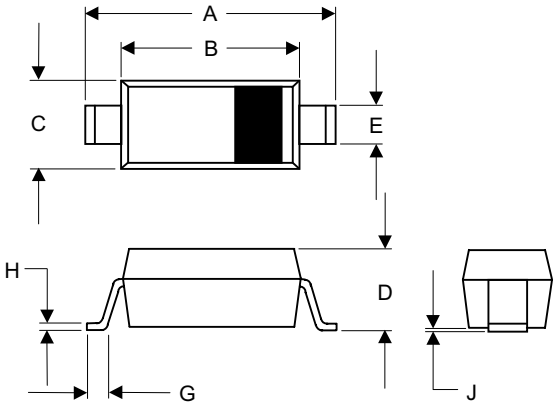
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Average Rectified Current	I_O	250	mA
Peak Forward Surge Current	I_{FSM}	2	A
Power Dissipation	P_D	500	mW
Thermal Resistance*	R	35	°C/W
Operation/Storage Temp. Range	T_j, T_{STG}	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Instantaneous Forward Voltage	V_F	1.0V	I_{FM} = 100mA; T_J = 25°C (Note 1)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25nA 50µA 2.5uA	V_R=20Volts T_J = 25°C T_J = 150°C V_R=75Volts
Typical Junction Capacitance	C_J	4pF	Measured at 1.0MHz, V_R=4.0V
Reverse Recovery Time	T_{rr}	4nS	I_F=10mA V_R = 6V R_L=100Ω

Note: 1. Valid provided that terminals are kept at ambient temperature

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

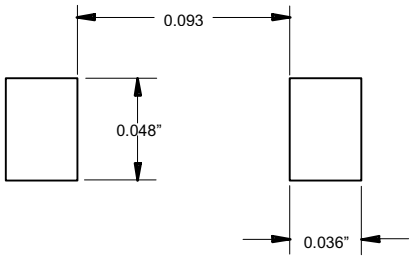
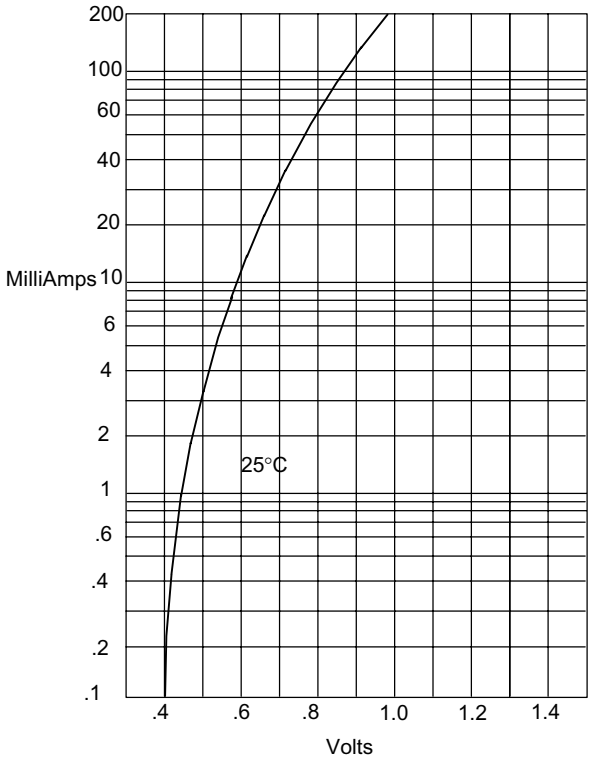
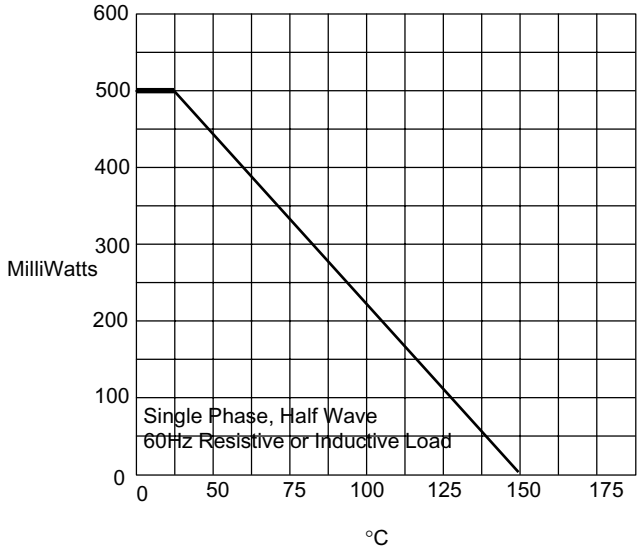


Figure 1
Typical Forward Characteristics



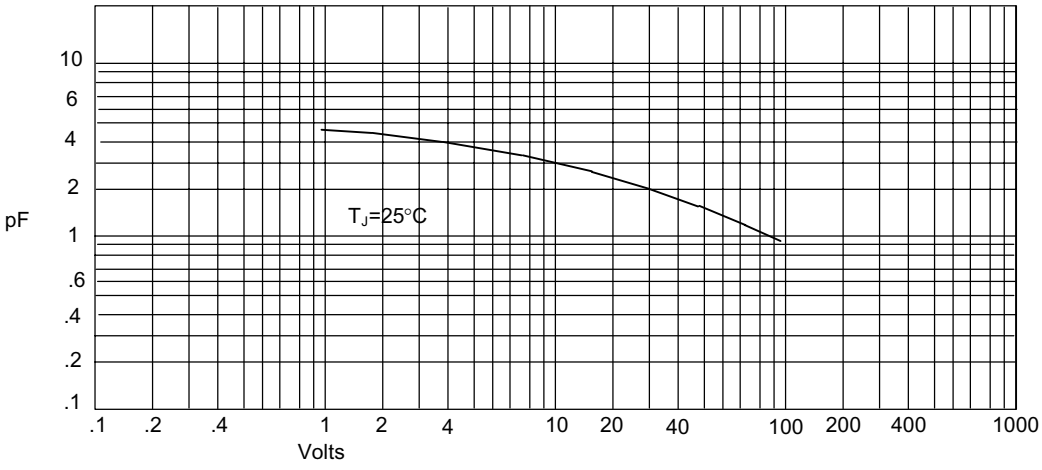
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



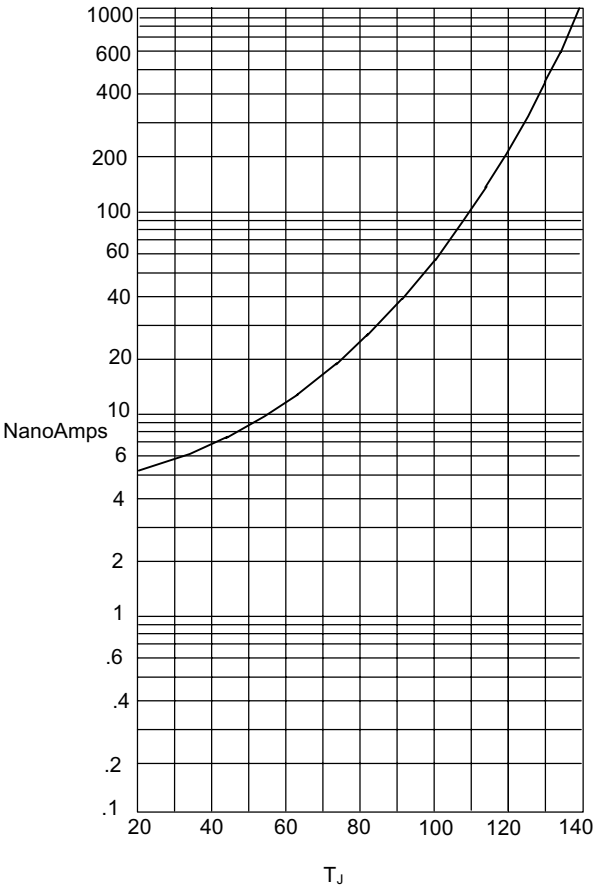
Admissable Power Dissipation - MilliWatts *versus*
Ambient Temperature -°C

Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

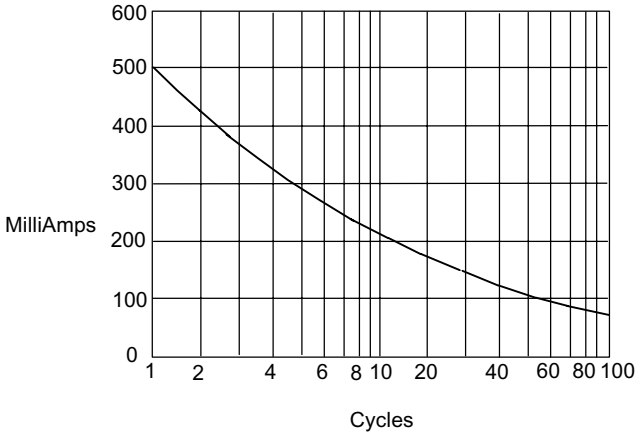
Figure 4
Typical Reverse Characteristics



T_A=25°C
T_A=100°C

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

Ordering Information

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