Micro Commercial Components
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DL4448

500mW 100Volt Switching Diode

Features

- Low Current Leakage
- Metalurgically Bonded Construction
- Low Cost

Maximum Ratings

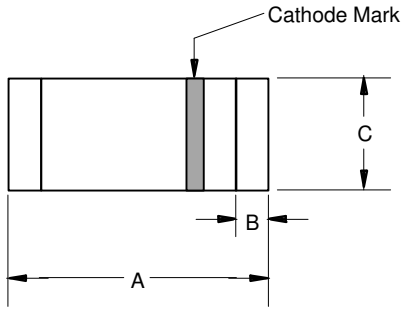
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 35°C/W Junction To Ambient

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 > 50Hz
Power Dissipation	P_{TOT}	500mW	
Junction Temperature	T_J	150°C	
Peak Forward Surge Current	I_{FSM}	500mA	t<1s
Instantaneous Forward Voltage	V_F	1.0V(MAX) 0.62-0.72V	I_{FM} = 100mA; I_{FM} = 5.0mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	25nA 5.0uA 50µA	V_R=20Volts T_J=25°C V_R=75V T_J=150°C V_R=20V
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

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

MINIMELF



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.134	.142	3.40	3.60	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	∅

SUGGESTED SOLDER PAD LAYOUT

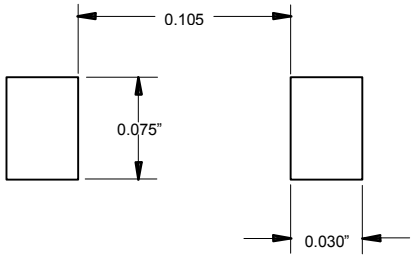
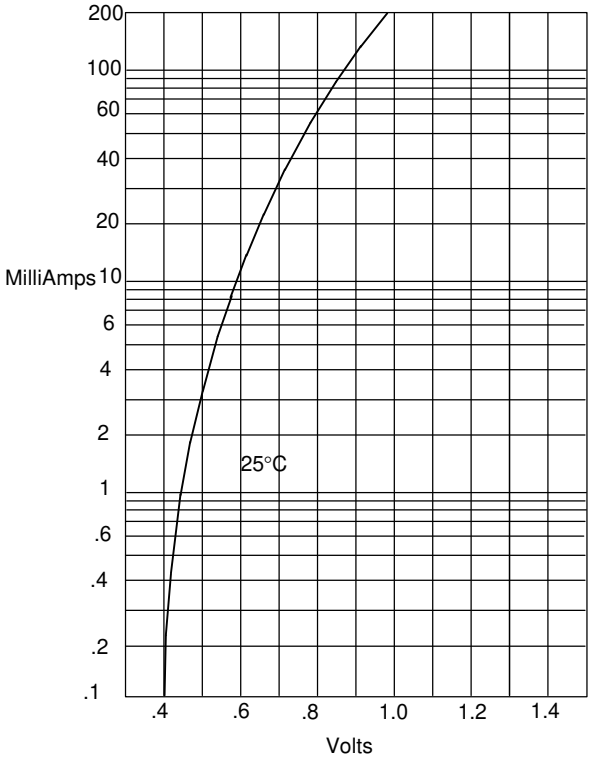
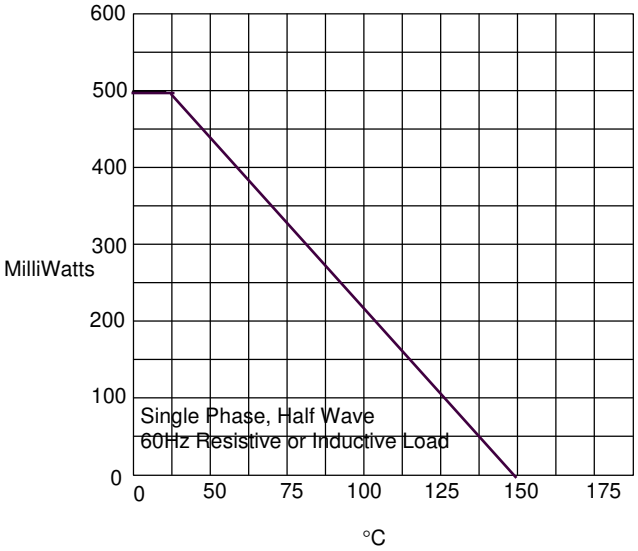


Figure 1
Typical Forward Characteristics



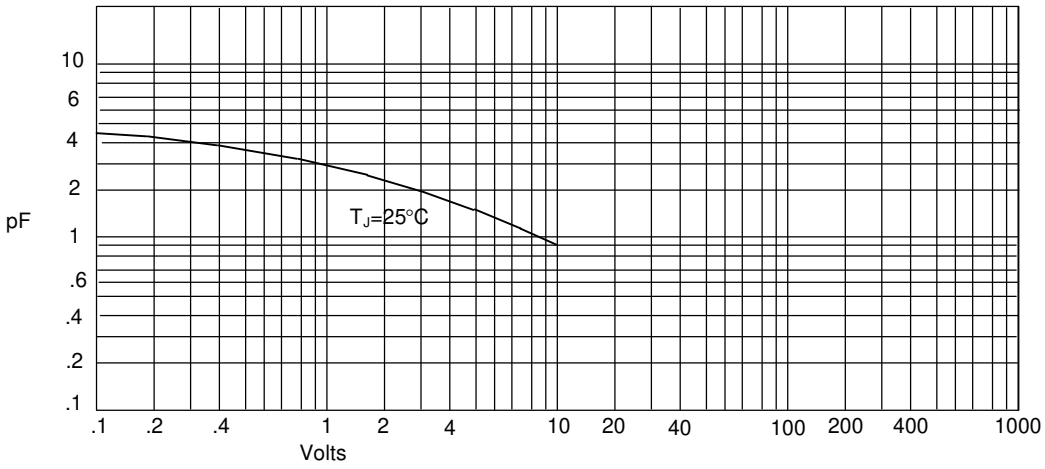
Instantaneous Forward Current - Amperes*versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



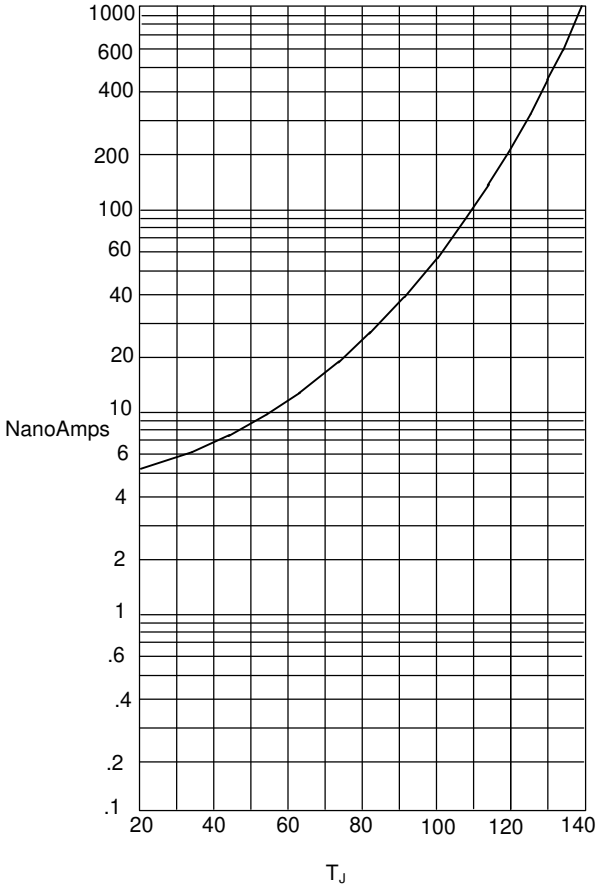
Average Forward Rectified Current - Amperes/ersus
Ambient Temperature -°C

Figure 3
Junction Capacitance



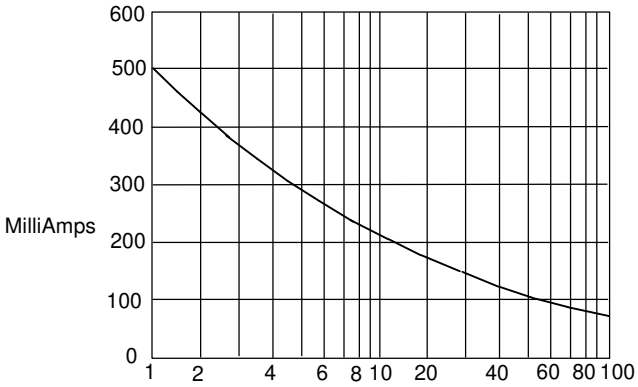
Junction Capacitance - pF*versus*
Reverse Voltage - Volts

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