

™

# DL4448

## Features

- Low Current Leakage
- Metalurgically Bonded Construction
- Low Cost
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -65°C to +200°C
- Storage Temperature: -65°C to +200°C
- Maximum Thermal Resistance; 35°C/W Junction To Ambient

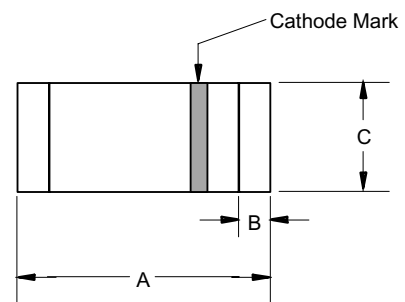
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |           |                         |  |
|---|-----------|-------------------------|--|
| Reverse Voltage   | $V_R$     | 75V                     |  |
| Peak Reverse Voltage                                    | $V_{RM}$  | 100V                    |  |
| Average Rectified Current                               | $I_O$     | 150mA                   | Resistive Load<br>f > 50Hz   |
| Power Dissipation                                       | $P_{TOT}$ | 500mW                   |  |
| Junction Temperature                                    | $T_J$     | 200°C                   |  |
| Peak Forward Surge Current                              | $I_{FSM}$ | 500mA                   | t<1s   |
| Instantaneous Forward Voltage                           | $V_F$     | 1.0V(MAX)<br>0.62-0.72V | $I_{FM} = 100mA$ ;<br>$I_{FM} = 5.0mA$                                     |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$     | 25nA<br>5.0uA<br>50uA   | $V_R=20Volts$<br>$T_J=25^\circ C$ $V_R=75V$<br>$T_J=150^\circ C$ $V_R=20V$ |
| Typical Junction Capacitance                            | $C_J$     | 4pF                     | Measured at<br>1.0MHz, $V_R=4.0V$  |
| Reverse Recovery Time                                   | $T_{rr}$  | 4nS                     | $I_F=10mA$<br>$V_R = 6V$<br>$R_L=100\Omega$                                |

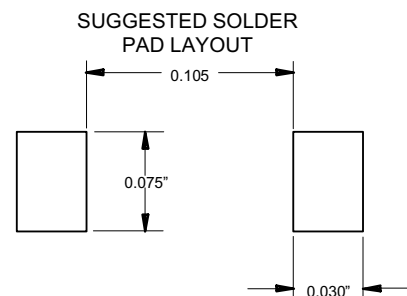
Note:1.Lead in Glass Exemption Applied, see EU Directive Annex 5.

## 500mW 100Volt Switching Diode

### MINIMELF

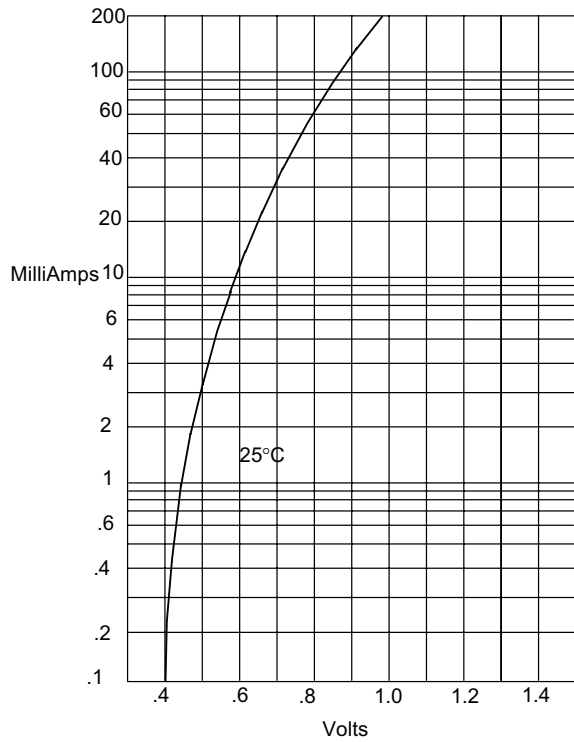


| DIM | DIMENSIONS |      |      |      | NOTE |
|-----|------------|------|------|------|------|
|     | INCHES     |      | MM   |      |      |
|     | MIN        | MAX  | MIN  | MAX  |      |
| A   | .134       | .142 | 3.40 | 3.60 |      |
| B   | .008       | .016 | .20  | .40  |      |
| C   |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



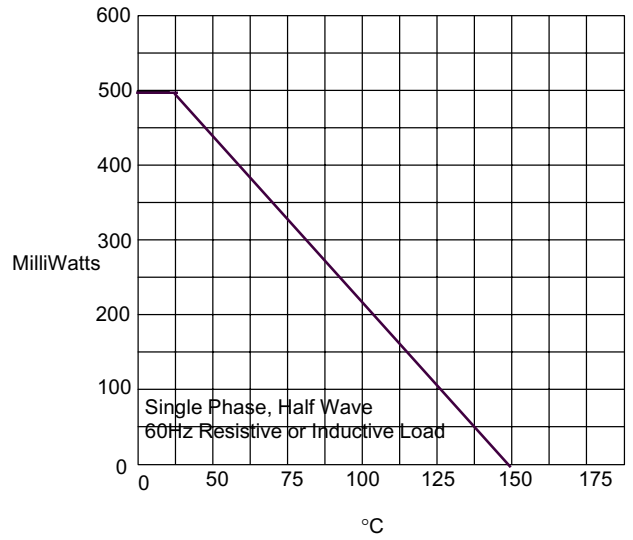
# DL4448

Figure 1  
Typical Forward Characteristics



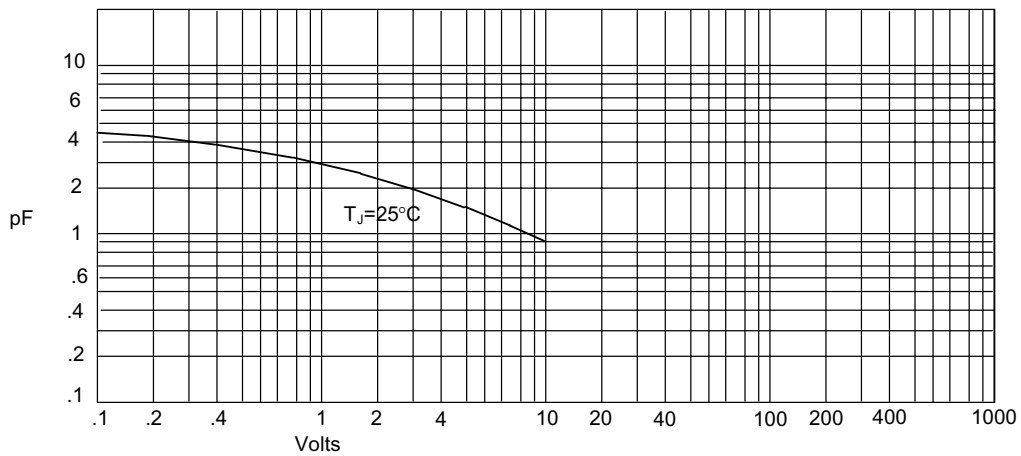
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

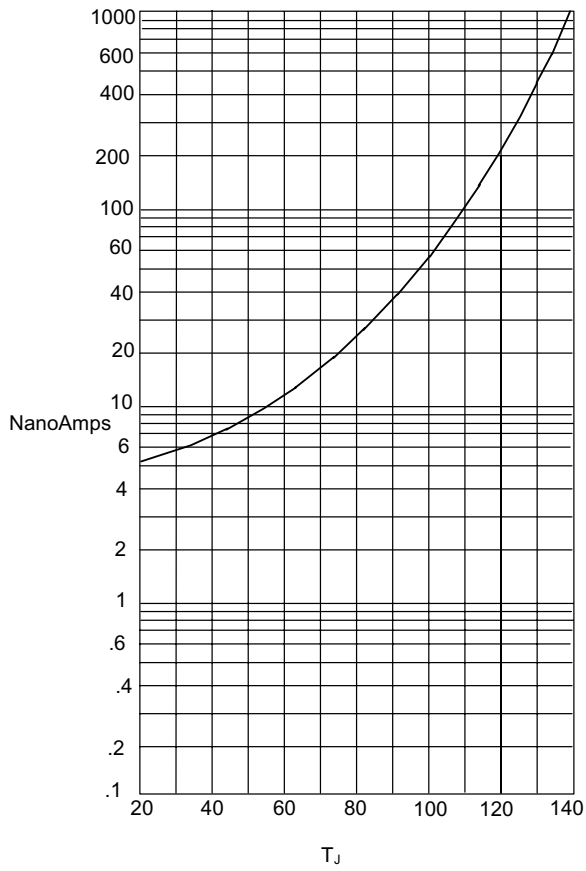
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

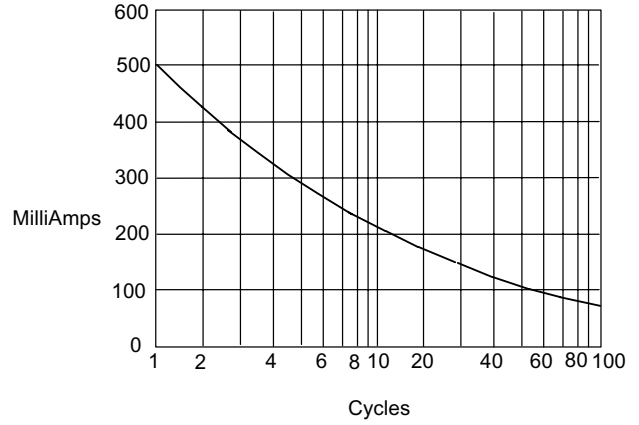
# DL4448

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

## Ordering Information

| Device           | Packing                |
|------------------|------------------------|
| (Part Number)-TP | Tape&Reel;2.5Kpcs/Reel |