

# DL4454

## Silicon Switching Diode 500 mW 75 Volt

### Features

- Fast Switching Speed and Low Current Leakage
- Compression Bond Construction ,Low Cost
- Surface Mount Application
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See ordering information)

### Maximum Ratings

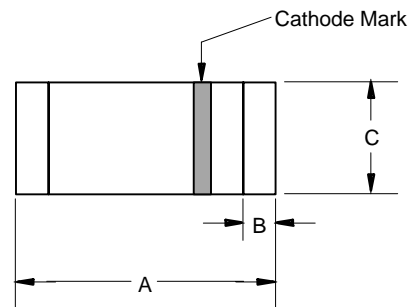
- Operation & Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 400K/W Junction to Ambient

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

Reverse Volt.	$V_R$	50V	
Peak Reverse Volt.	$V_{RM}$	75V	
Average Rectified Current	$I_O$	150mA	Resistive Load $f > 50\text{Hz}$
Power Dissipation	$P_{TOT}$	500mW	
Junction Temperature	$T_J$	175°C	
Peak Forward Surge Current	$I_{FSM}$	500mA	8.3ms, half sine
Maximum Instantaneous Forward Volt.	$V_F$	1.0V	$I_{FM}=10\text{mA};$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Volt.	$I_R$	0.1uA	$V_R=50\text{V}$ $T_J=25^\circ\text{C}$
Typical Junction Capacitance	$C_J$	2pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Reverse Recovery Time	$T_{rr}$	4nS	$I_F=10\text{mA}$ $V_R=6\text{V}$ $I_R=1\text{mA}$ $R_L=100\text{OHMS}$

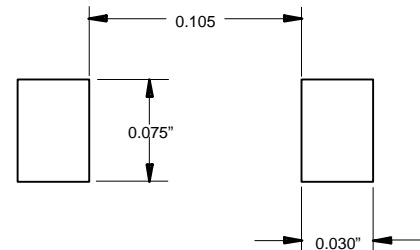
Note:1.Lead in Glass Exemption Applied, see EU Directive Annex 5.

### MINIMELF



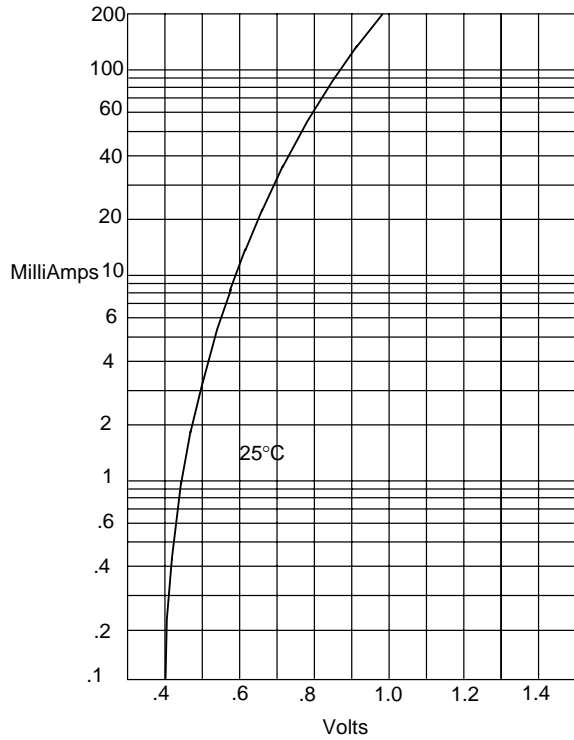
DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.134	.142	3.40	3.60	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	

### SUGGESTED SOLDER PAD LAYOUT



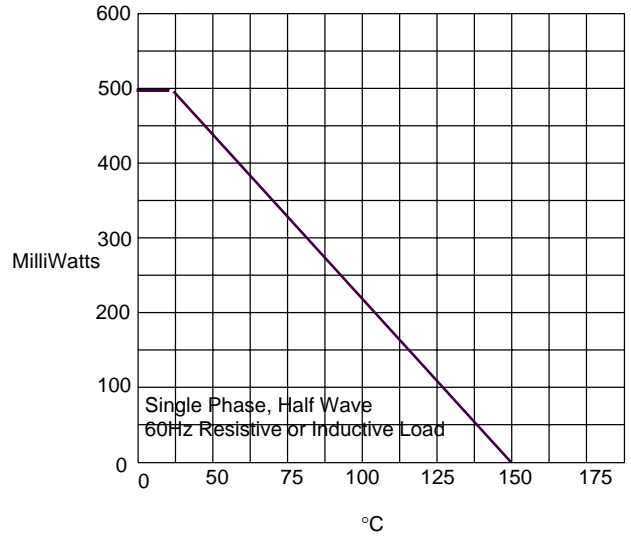
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Figure 1  
Typical Forward Characteristics



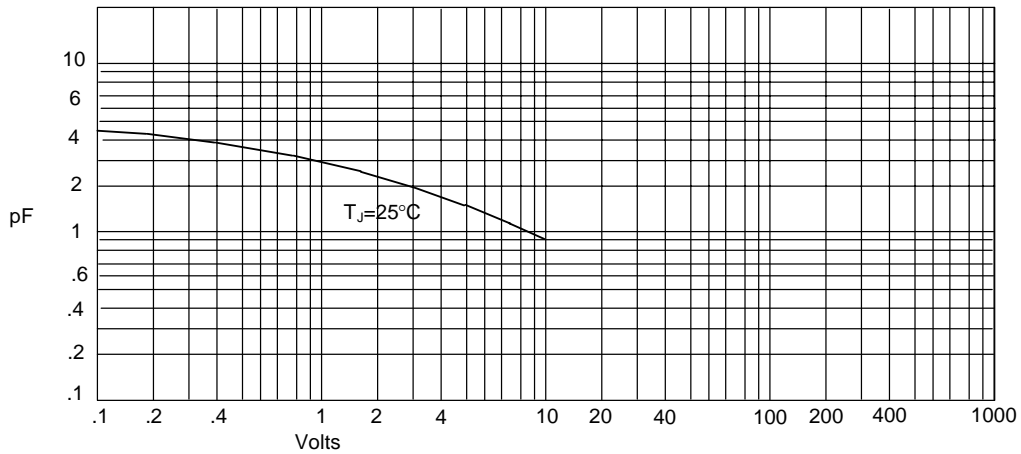
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

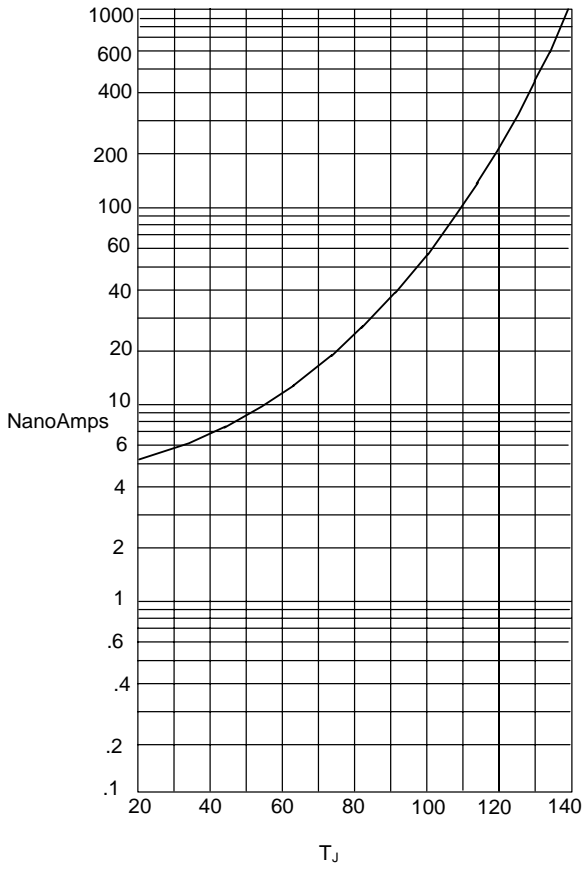
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

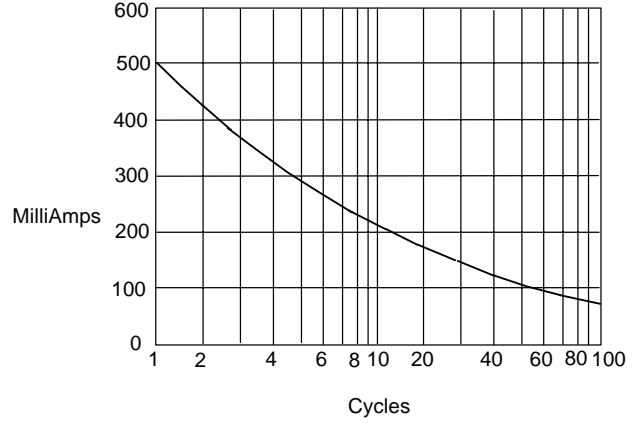
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Figure 4  
Typical Reverse Characteristics



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

## Ordering Information

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

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