



Micro Commercial Components



Micro Commercial Components  
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# DL4148

## Features

- Low Current Leakage, Low Cost
- Compression Bond Construction
- Surface Mount Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

## Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance: 500K/W Junction To Ambient  
Tested on PC Board 50mm x 50mm x 1.6mm

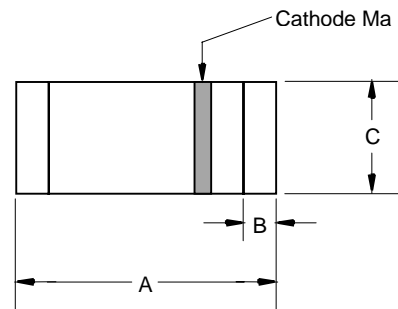
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Voltage	$V_R$	75V	
Breakdown Voltage	$V_{BR}$	100V	$I_R = 100 \mu A$
Average Forward Current	$I_O$	150mA	
Power Dissipation	$P_{TOT}$	500mW	
Junction Temperature	$T_J$	175°C	
Peak Forward Surge Current	$I_{FSM}$	2.0A	$t_p = 1.0 \mu s$
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 10mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	25nA 5.0 $\mu A$ 50 $\mu A$	$V_R = 20V; T_J = 25^\circ C$ $V_R = 75V; T_J = 25^\circ C$ $V_R = 20V; T_J = 150^\circ C$
Maximum Junction Capacitance	$C_J$	4.0pF	Measured at 1.0MHz, $V_R = 0V$
Maximum Reverse Recovery Time	$T_{rr}$	4.0ns	$I_F = 10mA; V_R = 6V$ $R_L = 100\Omega$

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

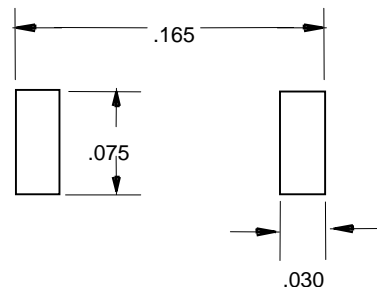
## 500mW High Speed Switching Diode 100 Volt

### MiniMELF



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	Ø

### SUGGESTED SOLDER PAD LAYOUT

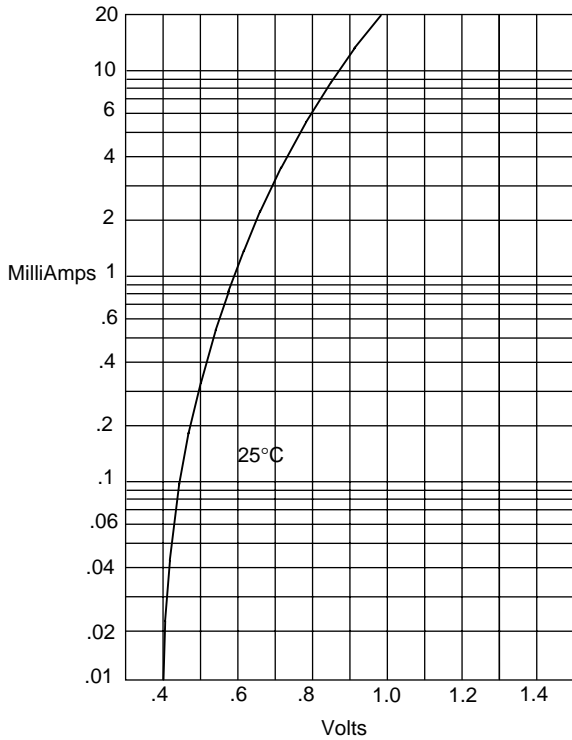


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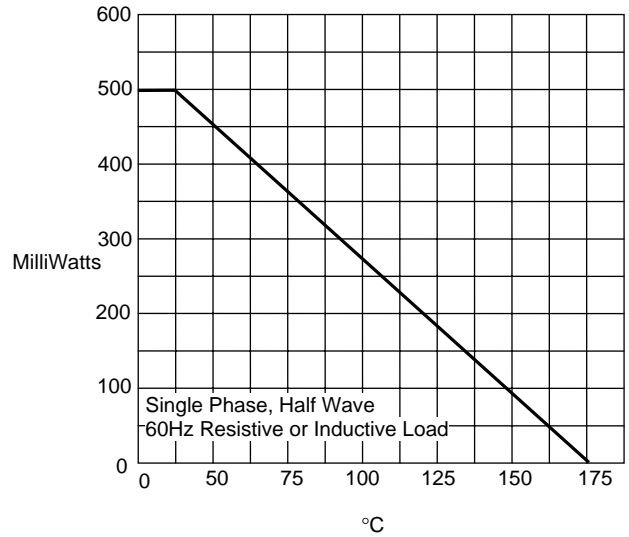
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Figure 1  
Typical Forward Characteristics



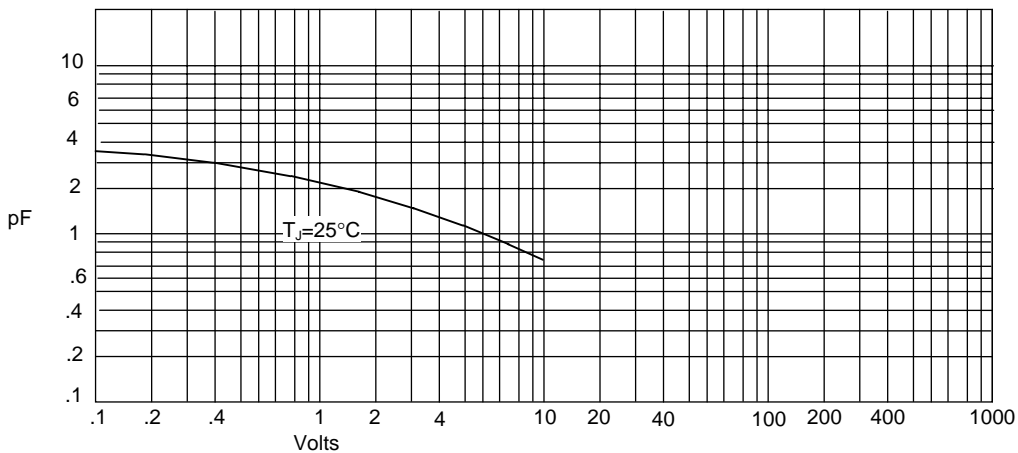
Instantaneous Forward Current - MilliAmperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Admissible Power Dissipation - MilliWatts versus  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



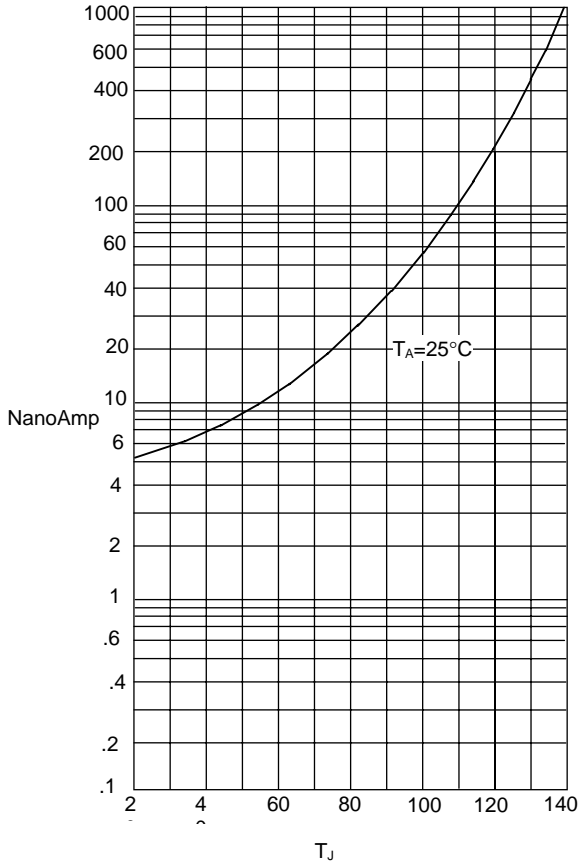
Junction Capacitance - pF versus  
Reverse Voltage - Volts

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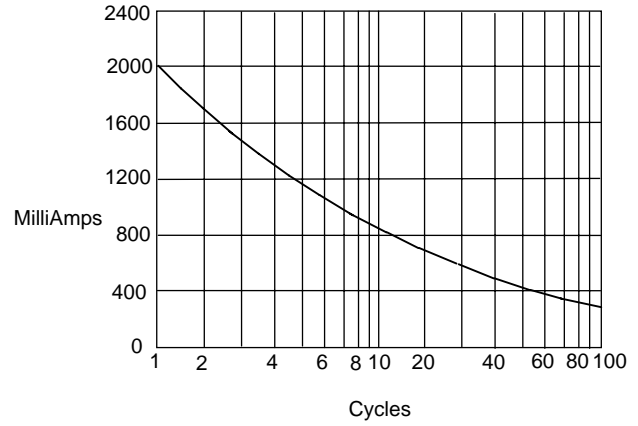
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Figure 4  
Typical Reverse Characteristics



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: 2.5Kpcs/Reel

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