



Micro Commercial Components

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# DL4001 THRU DL4007

## Features

- Glass Passivated Junction
- Low Current Leakage
- Surface Mount Applications
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

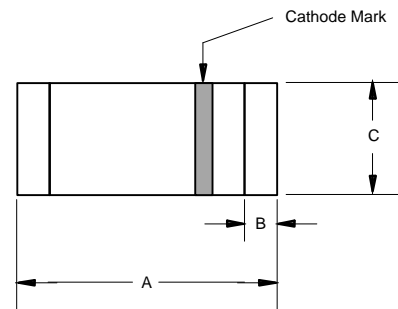
## 1 Amp Glass Passivated Rectifier 50 to 1000 Volts

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DL4001	-----	50V	35V	50V
DL4002	-----	100V	70V	100V
DL4003	-----	200V	140V	200V
DL4004	-----	400V	280V	400V
DL4005	-----	600V	420V	600V
DL4006	-----	800V	560V	800V
DL4007	-----	1000V	700V	1000V

## MELF



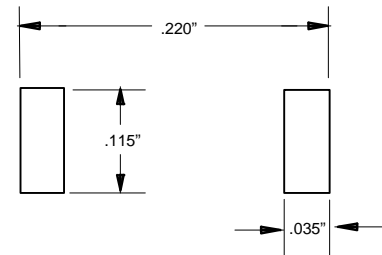
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.185	.205	4.70	5.20	
B	.018	.022	0.46	0.56	Nominal
C	.095	.105	2.40	2.67	∅

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	12pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

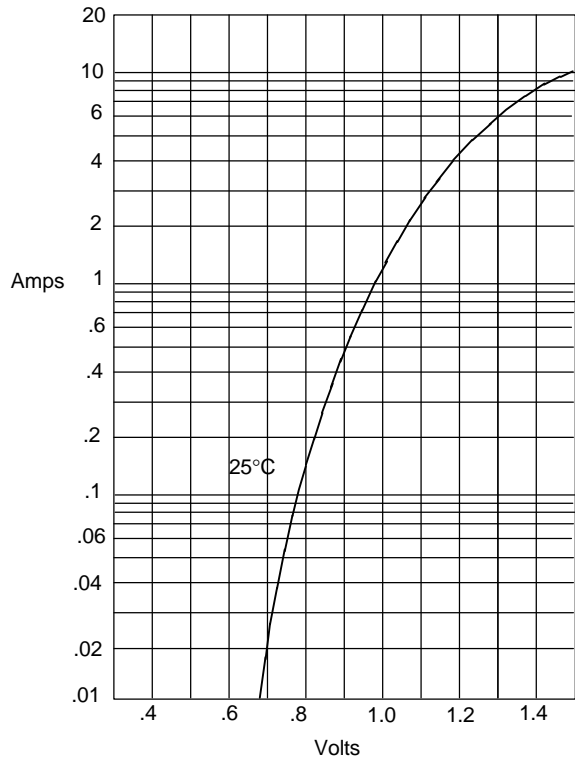
\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

## SUGGESTED SOLDER PAD LAYOUT



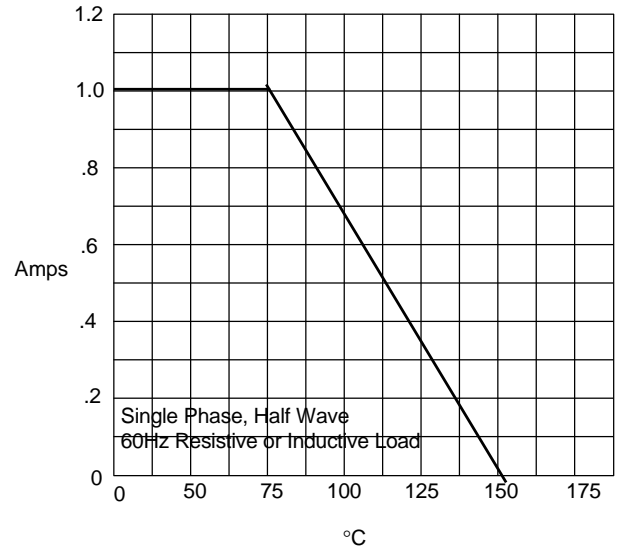
# DL4001 thru DL4007

Figure 1  
Typical Forward Characteristics



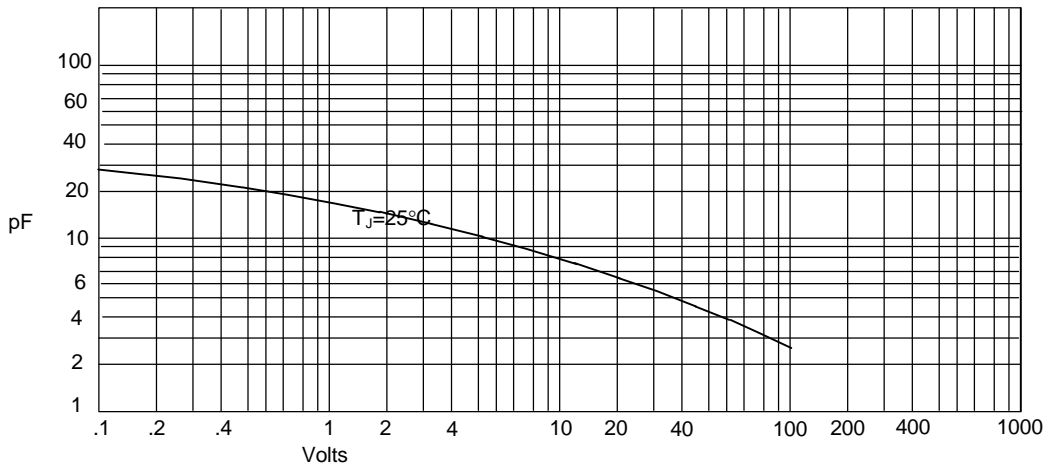
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



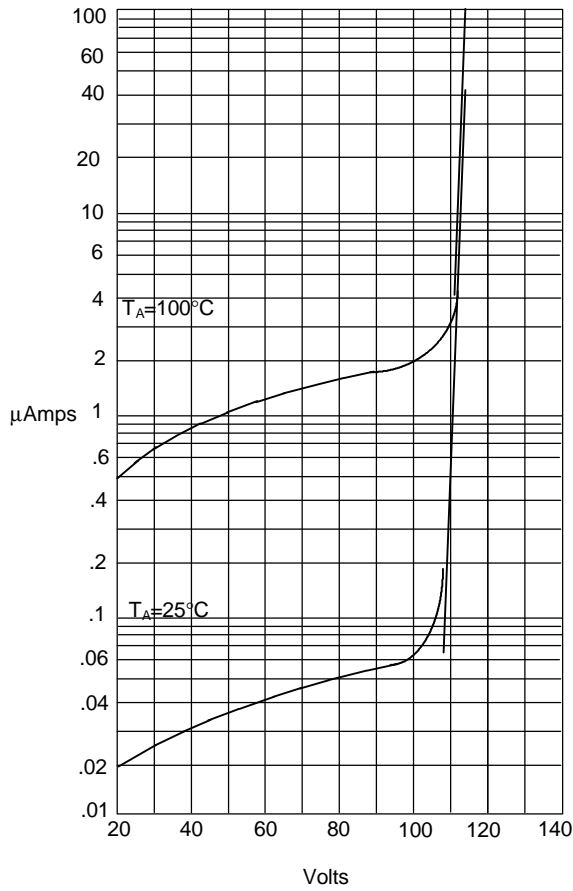
Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 3  
Junction Capacitance



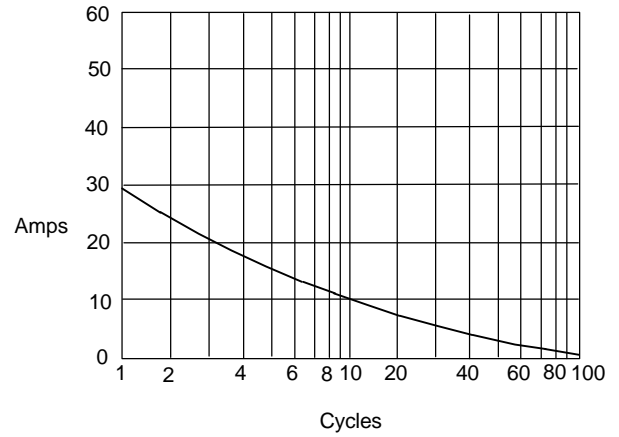
Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles



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