

NOT RECOMMENDED FOR NEW DESIGNS  
USE FS1A-L~FS1J-L SERIES  
OR FS1AE~FS1JE SERIES

**M·C·C**

Micro Commercial Components



Micro Commercial Components  
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## Features

- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Low Leakage Current
- Metalurgically Bonded Construction
- Surface Mount Applications
- Glass Passivated Junction

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DL4933	---	50V	35V	50V
DL4934	---	100V	70V	100V
DL4935	---	200V	140V	200V
DL4936	---	400V	280V	400V
DL4937	---	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 55^\circ C$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM} = 1.0A$ ; $T_J = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	$5.0\mu A$ $100\mu A$	$T_J = 25^\circ C$ $T_J = 125^\circ C$
Maximum Reverse Recovery Time	$T_{rr}$	200ns	$I_F = 0.5A$ , $I_R = 1.0A$ , $I_{rr} = 0.25A$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R = 4.0V$

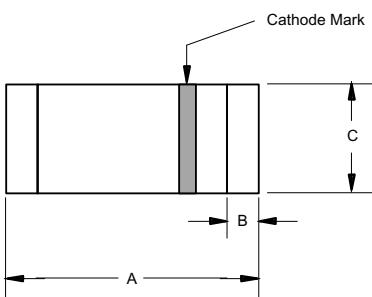
\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 1%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

**DL4933  
THRU  
DL4937**

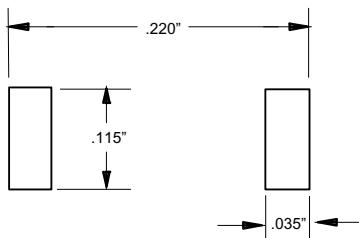
**1 Amp Glass Passivated, Fast Recovery Rectifier  
50 to 600 Volts**

## MELF



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.190	.205	4.80	5.20	
B	---	.022	---	.55	Nominal
C	.095	.105	2.40	2.67	Ø

## SUGGESTED SOLDER PAD LAYOUT



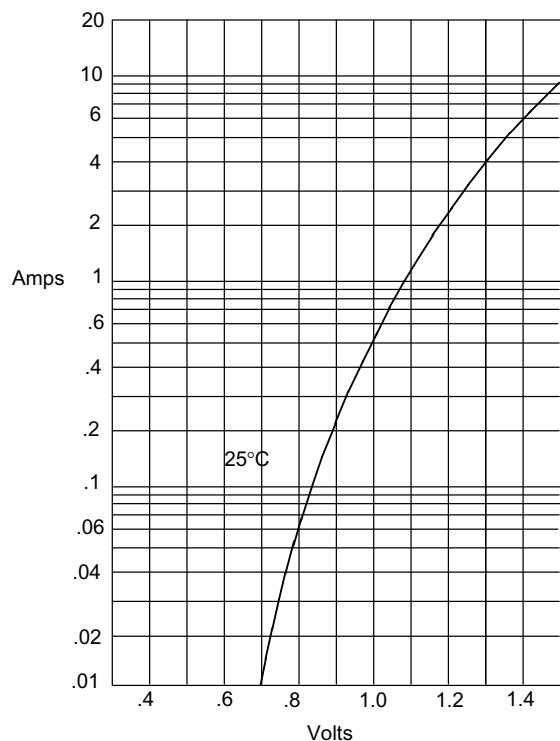
**www.mccsemi.com**

# DL4933 thru DL4937

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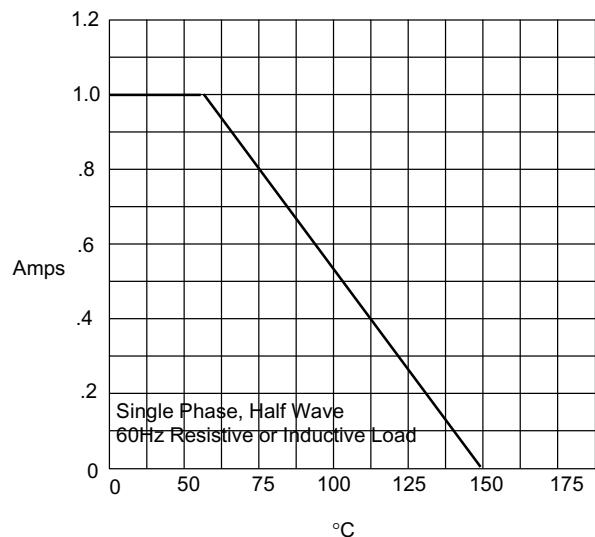
TM  
Micro Commercial Components

Figure 1  
Typical Forward Characteristics



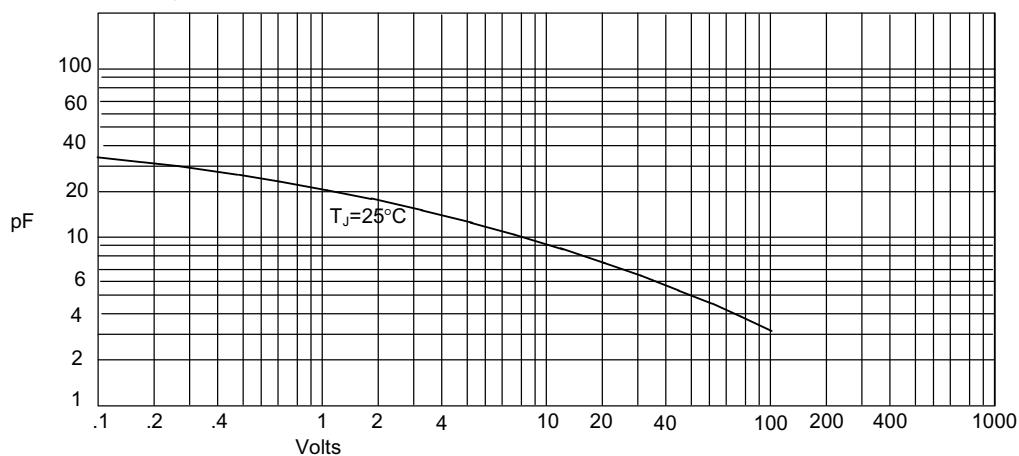
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature  $^\circ\text{C}$

Figure 3  
Junction Capacitance

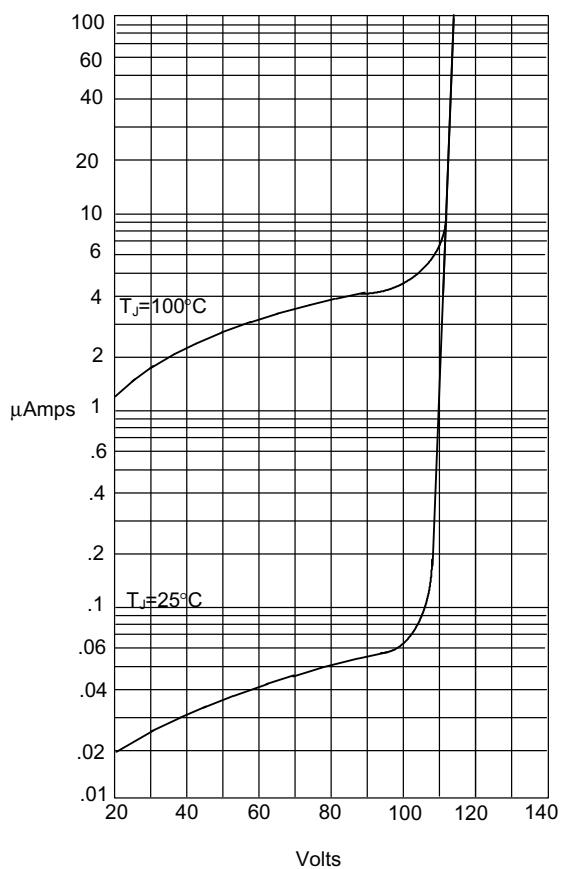


Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

DL4933 thru DL4937

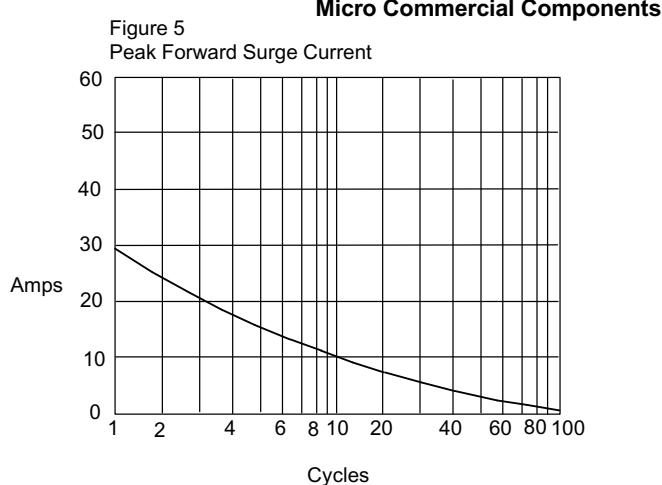
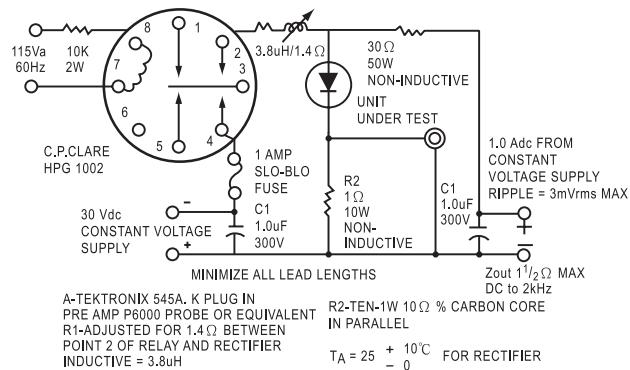
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Figure 4  
Typical Reverse Characteristics

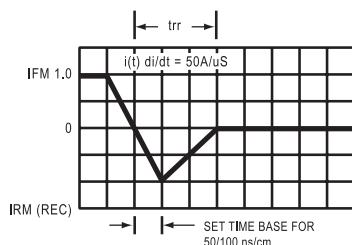


## Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram



## Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 5Kpcs/Reel

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