

**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
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**DLFR106  
THRU  
DLFR107**

## Features

- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Fast Switching Speed
- Surface Mount Applications
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating & Storage Temperature: -65°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
DLFR106	-----	800V	560V	800V
DLFR107	-----	1000V	700V	1000V

Electrical Characteristics @25°C Unless Otherwise Specified

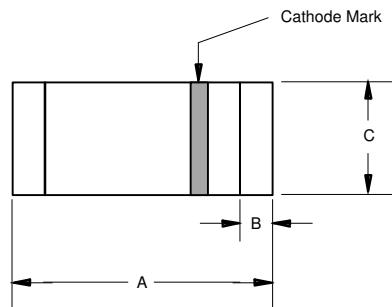
Average Forward Current	$I_{F(AV)}$	1.0A	$T_J=55^\circ C$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM}=1.0A$ $T_A=25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0uA 100uA	$T_J=25^\circ C$ $T_J=125^\circ C$
Maximum Reverse Recovery Times DLFR106 DLFR107	$t_{rr}$	250ns 500ns	$I_F=0.5A$ , $I_R=1.0A$ , $I_r=0.25A$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0V$

Pulse test: Pulse width 300 usec, duty cycle 1%.

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

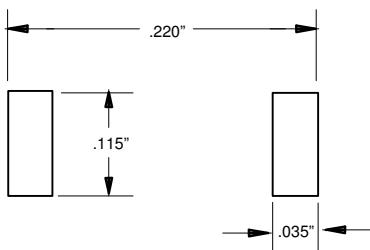
**1 Amp Glass  
Passivated, Fast  
Recovery Rectifier  
800 to 1000 Volts**

## MELF



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

## SUGGESTED SOLDER PAD LAYOUT

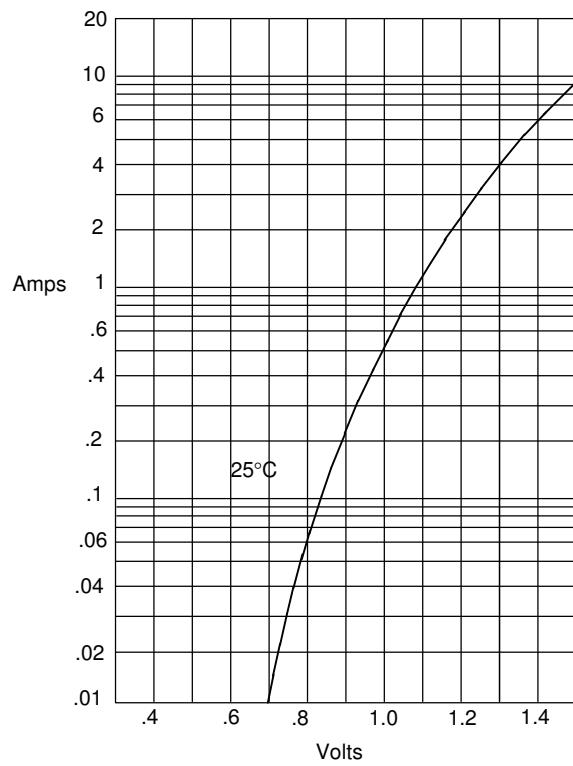


# DLFR106 thru DLFR107

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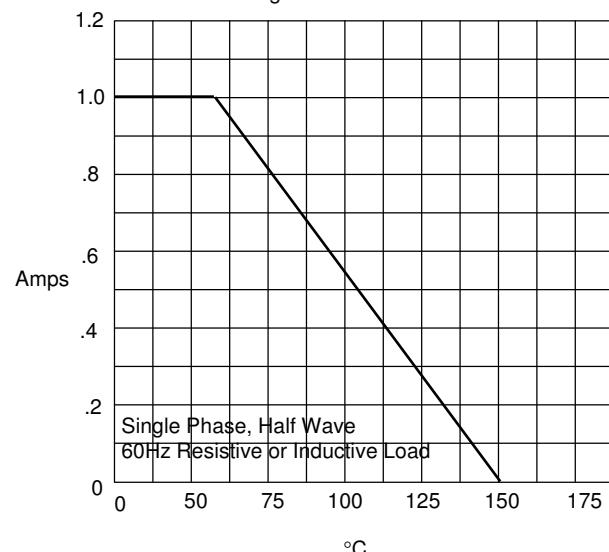
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Figure 1  
Typical Forward Characteristics



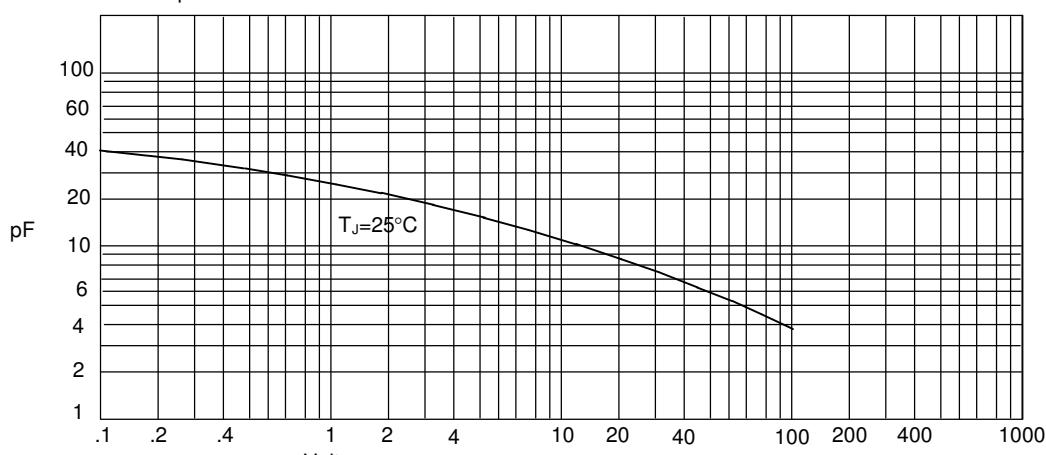
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

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

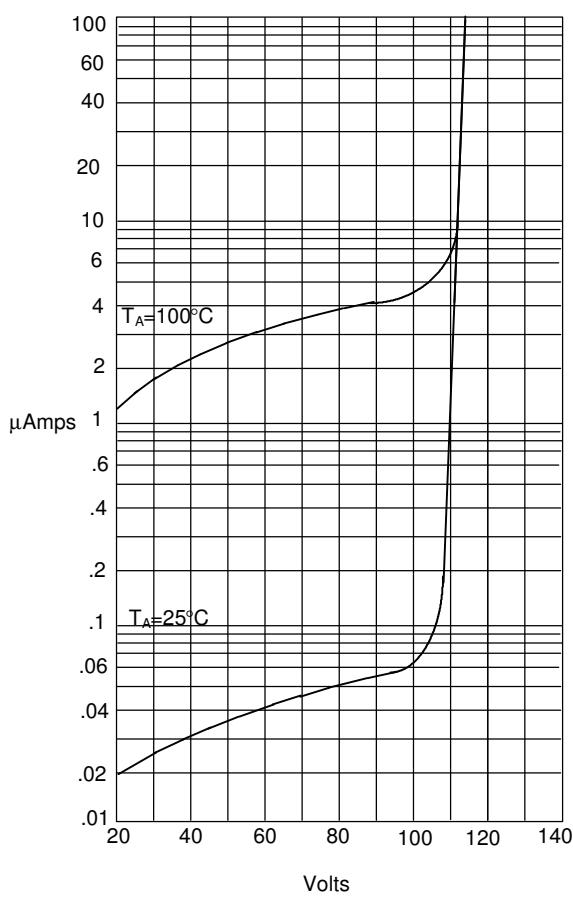
# DLFR106 thru DLFR107

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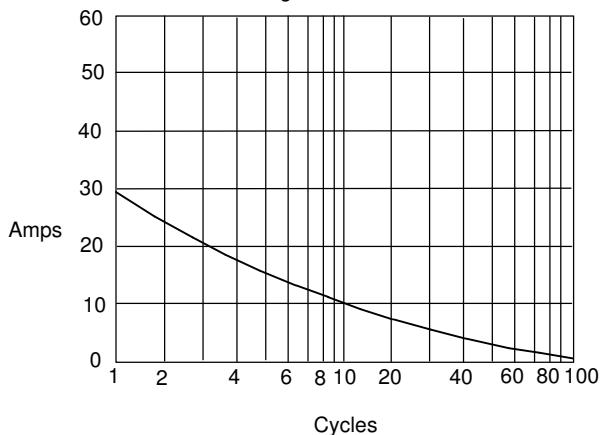
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Figure 4  
Typical Reverse Characteristics



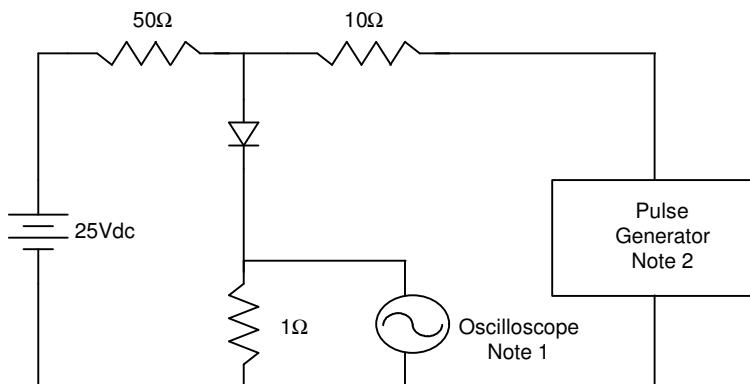
Instantaneous Reverse Leakage Current - MicroAmperesversus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



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

Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram

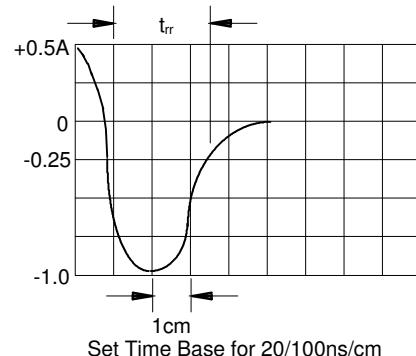


Notes:

1. Rise Time = 7ns max.
2. Rise Time = 10ns max.
3. Resistors are non-inductive

Input impedance = 1 megohm, 22pF

Source impedance = 50 ohms



Set Time Base for 20/100ns/cm

**Ordering Information :**

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

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