

# DLFR106 THRU DLFR107

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

### 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

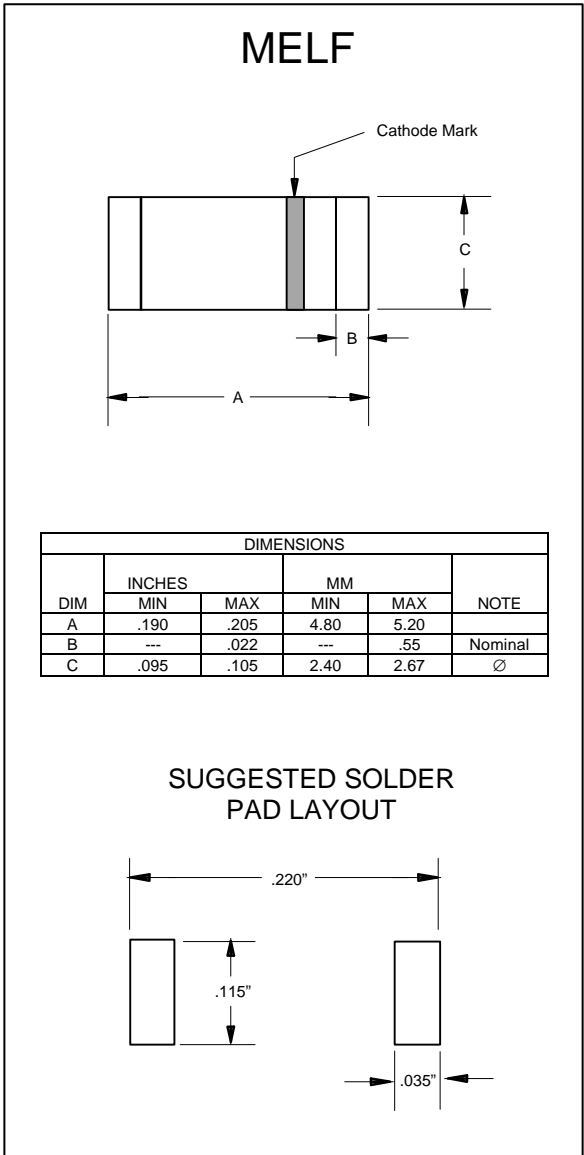
Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DLFR106	-----	800V	560V	800V
DLFR107	-----	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

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

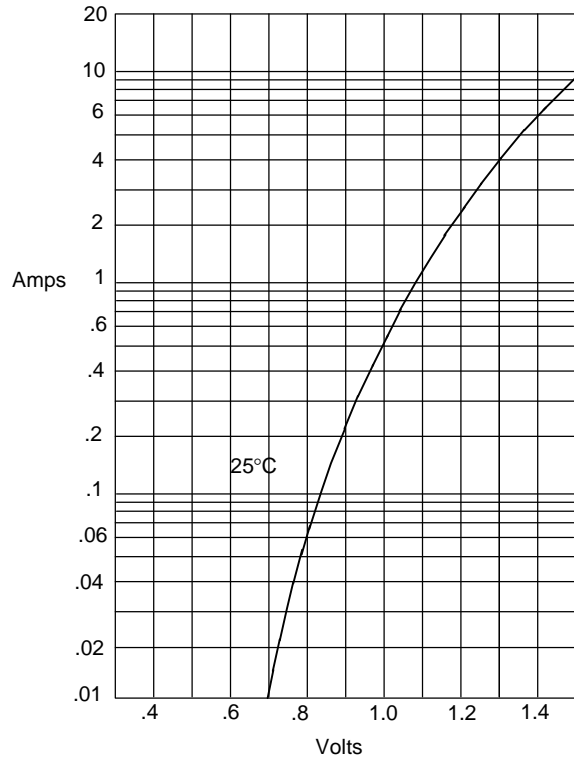
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.





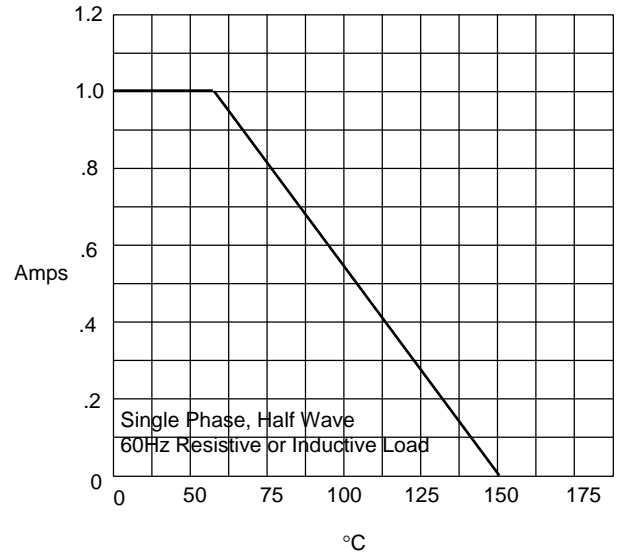
# DLFR106 thru DLFR107

Figure 1  
Typical Forward Characteristics



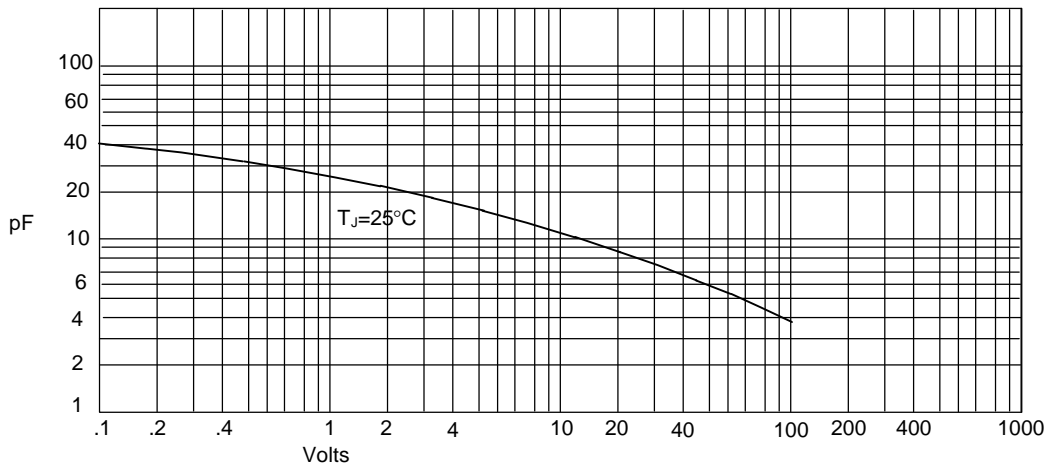
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Single Phase, Half Wave  
60Hz Resistive or Inductive Load  
Average Forward Rectified Current - Amperes/ersus  
Ambient Temperature -°C

Figure 3  
Junction Capacitance



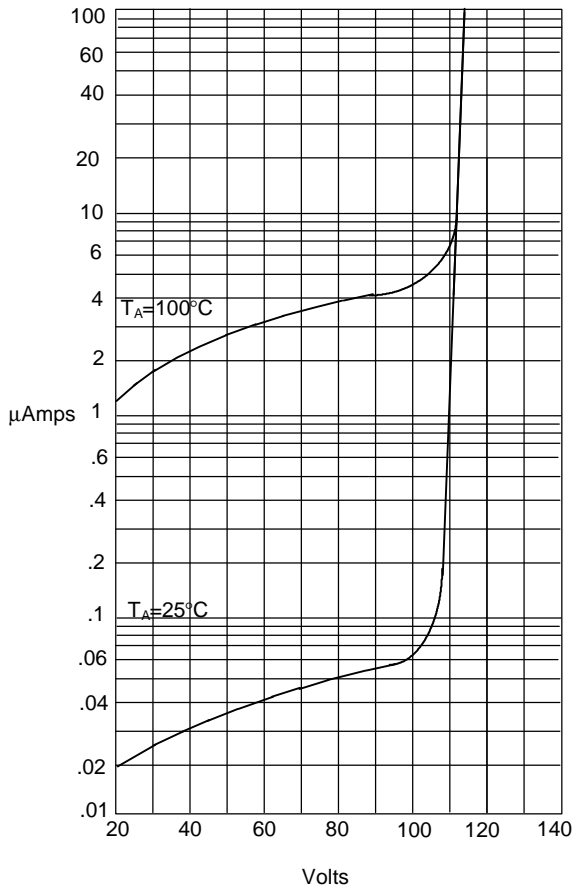
Junction Capacitance - pF versus  
Reverse Voltage - Volts



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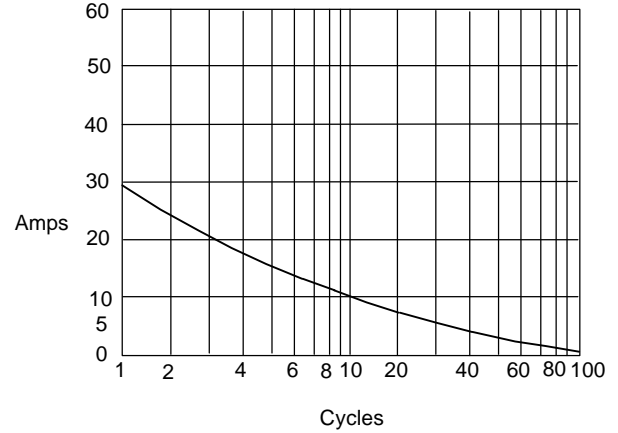
# DLFR106 thru DLFR107

Figure 4  
Typical Reverse Characteristics



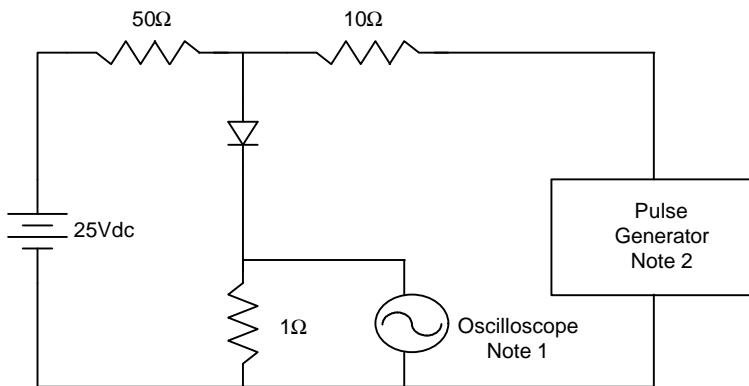
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current

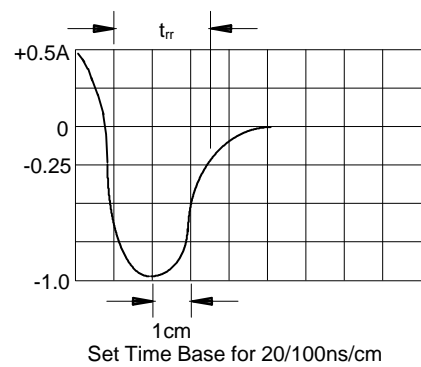


Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.  
Input impedance = 1 megohm, 22pF
  2. Rise Time = 10ns max.  
Source impedance = 50 ohms
  3. Resistors are non-inductive





## Ordering Information :

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

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