Micro Commercial Components
21201 Itasca Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

DLFR106 THRU DLFR107

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

Features

- Fast Switching Speed
- Low Leakage Current
- Metalurgically Bonded Construction
- Surface Mount Applications

Maximum Ratings

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

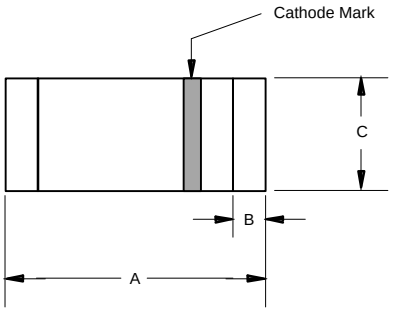
MCC Catalog Number	Device Marking	Maximum Reccurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DLFR106	-----	800V	560V	800V
DLFR107	-----	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_J=55°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°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0uA 100uA	T_J=25°C T_J=125°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

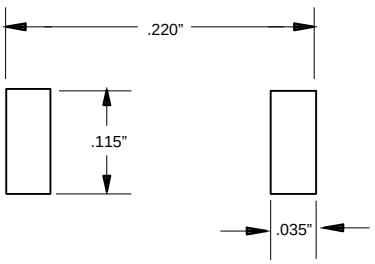
Pulse test: Pulse width 300 usec, duty cycle 1%.

MELF



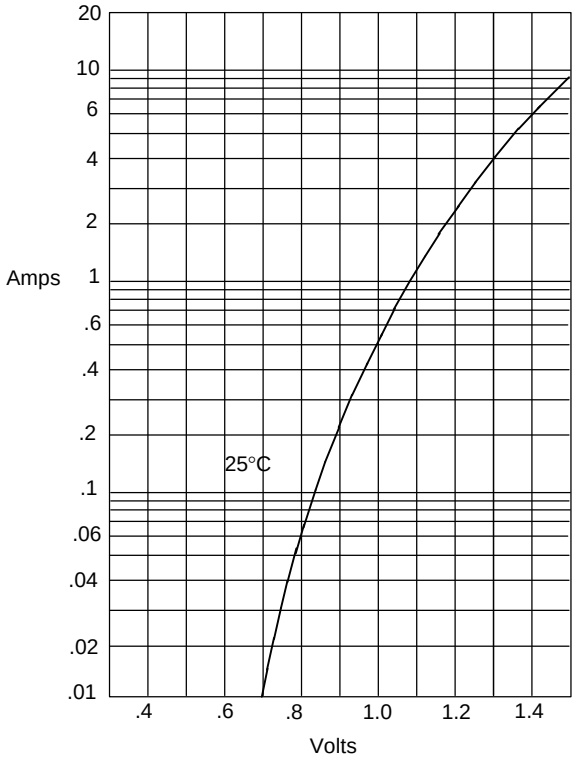
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.190	.205	4.80	5.20	
B	---	.022	---	.55	Nominal
C	.095	.105	2.40	2.67	∅

SUGGESTED SOLDER PAD LAYOUT



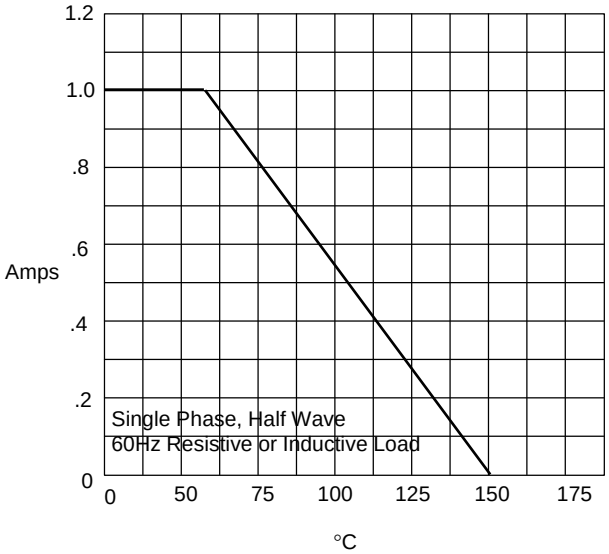
DLFR106 thru DLFR107

Figure 1
Typical Forward Characteristics



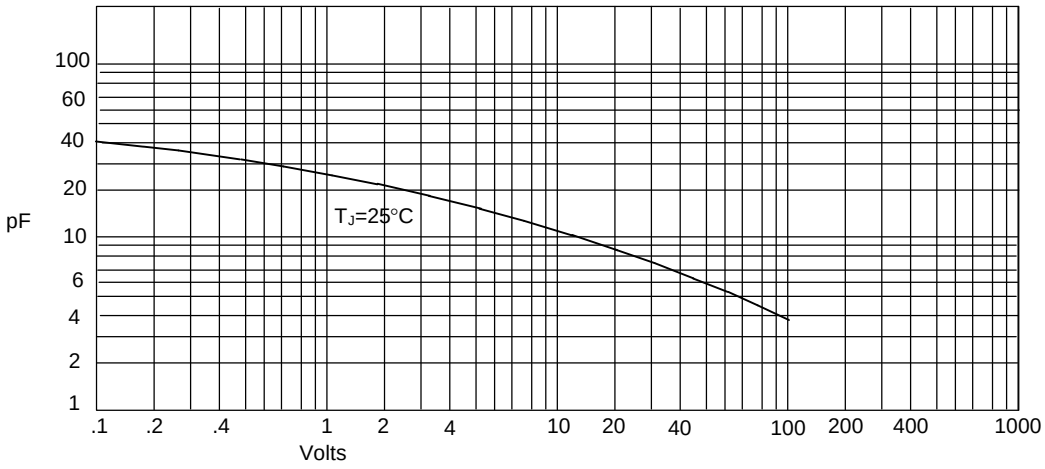
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



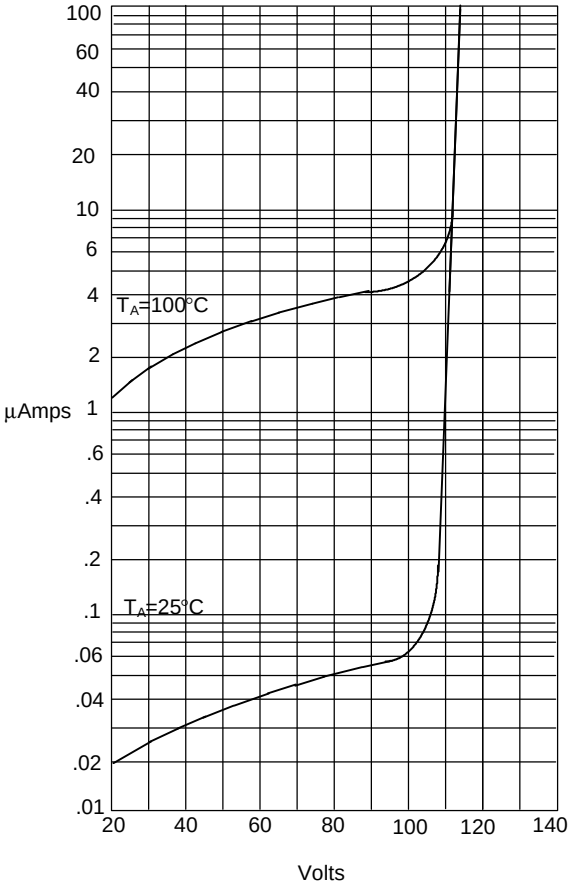
Average Forward Rectified Current - Amperes/ersus
Ambient Temperature -°C

Figure 3
Junction Capacitance



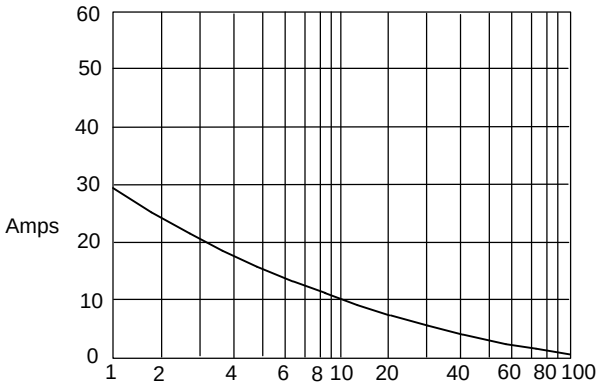
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



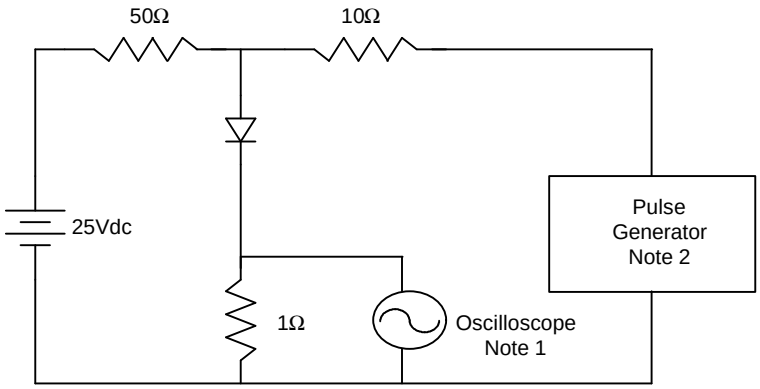
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

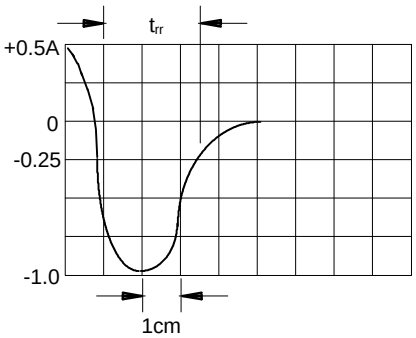
Figure 5
Peak Forward Surge Current



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

Figure 6
Reverse Recovery Time Characteristic And Test Circuit Diagram





Set Time Base for 20/100ns/cm

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