

DL4001 THRU DL4016

Features

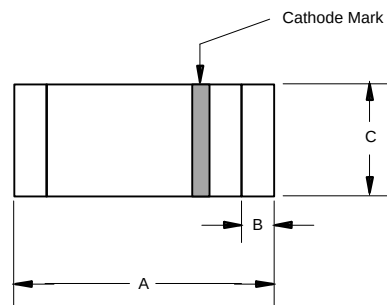
- Glass Passivated Junction
- Low Current Leakage
- Metalurgically Bonded Construction
- Surface Mount Applications

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
DL4013	----	1300V	910V	1300V
DL4016	----	1600V	1120V	1600V

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	Ø

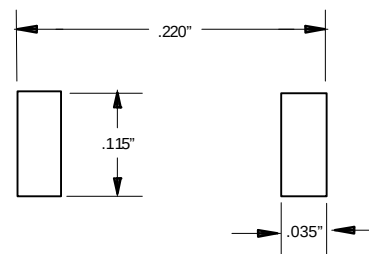
Electrical Characteristics @ 25°C Unless Otherwise Specified

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 DL4001-4007 DL4013-4016	V_F	1.1V 1.2V	$I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage DL4001-4007 DL4013-4016	I_R	5.0µA 10µA 50µA	$T_J = 25^\circ\text{C}$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	12pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 300 µsec, Duty cycle 2%

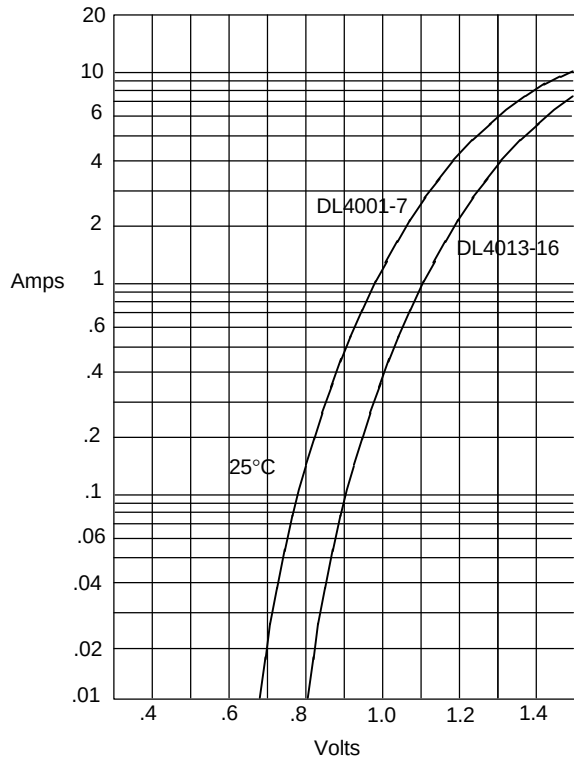
1 Amp Glass Passivated Rectifier 50 to 1600 Volts

SUGGESTED SOLDER PAD LAYOUT



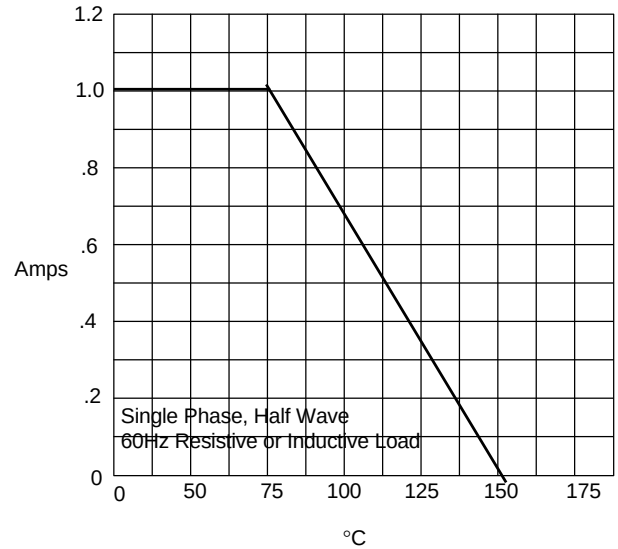
DL4001 thru DL40 16

Figure 1
Typical Forward Characteristics



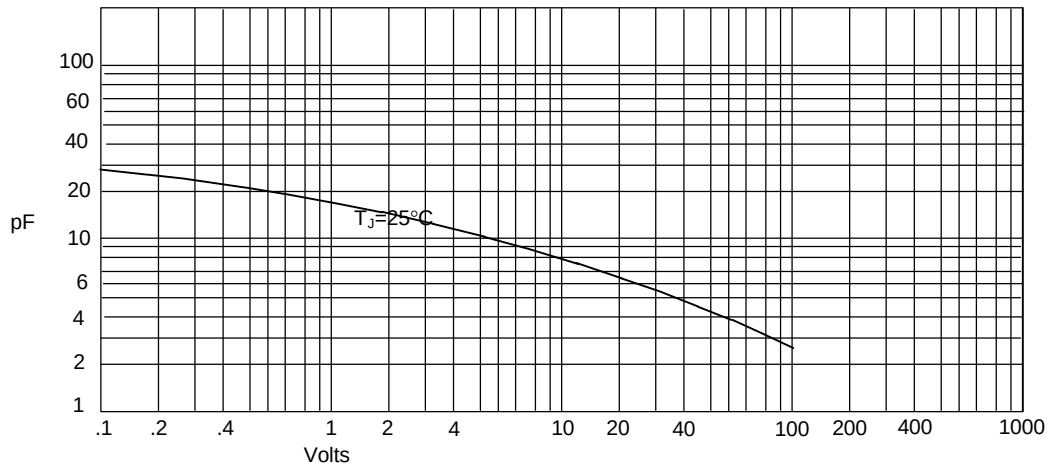
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



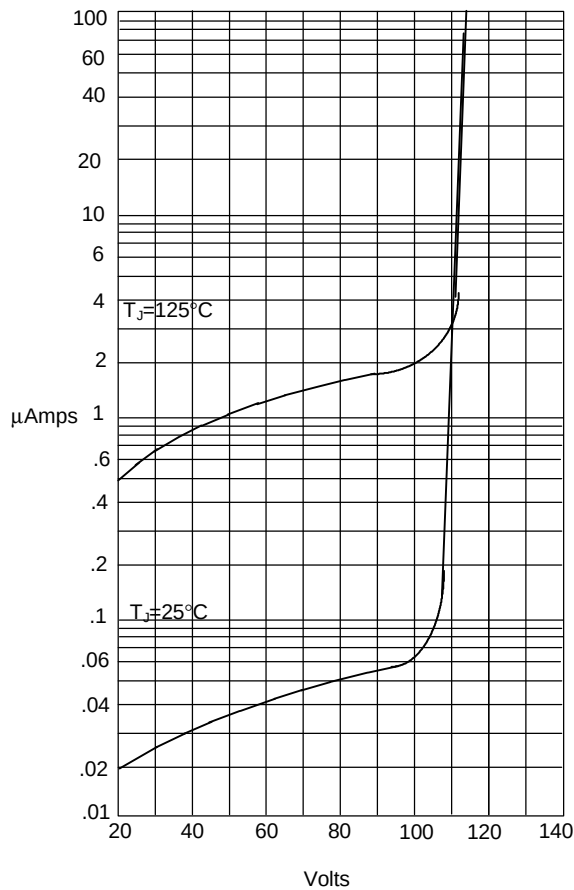
Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

Figure 3
Junction Capacitance



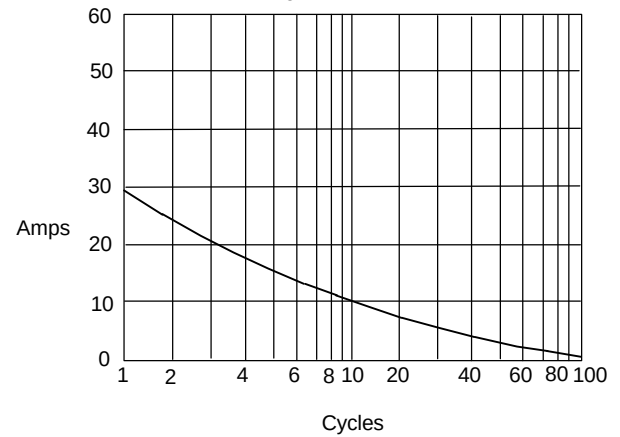
Junction Capacitance - pF versus
Reverse Voltage - Volts

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