



# LL4001G THRU LL4007G

1.0 AMP Surface Mount Glass Passivated Silicon Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

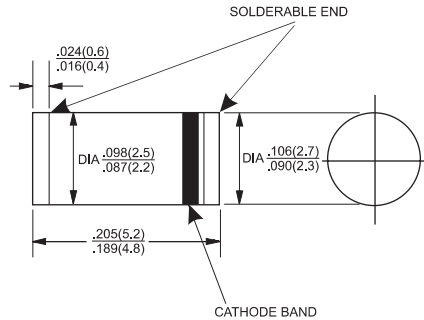
## Features

- ✧ Plastic package has carries underwriters Laboratory flammability classification 94V-0
- ✧ Surge overload rating to 30 Amperes peak
- ✧ Ideal for printed circuit board.
- ✧ Reliable low cost construction utilizing molded plastic technique results in in-expensive product.
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds at terminals.

## Mechanical Data

- ✧ Solderability per MIL-STD-750, method 208 at terminals.
- ✧ Mounting position: Any
- ✧ Weight: 0.12 gram

## MELF



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	LL	LL	LL	LL	LL	LL	LL	Units
		4001G	4002G	4003G	4004G	4005G	4006G	4007G	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$ $\mu\text{A}$
Typical Junction Capacitance ( Note 1 )	$C_j$	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	50							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	- 65 to + 150							$^\circ\text{C}$

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

2. Thermal Resistance from Junction to case. Mount on 0.2" x 0.2" Cu-pad on P.C.B.

### RATINGS AND CHARACTERISTIC CURVES (LL4001G THRU LL4007G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

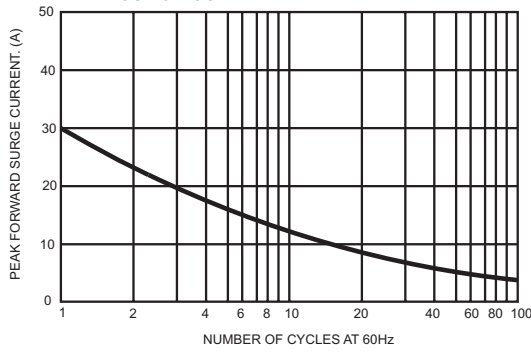


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

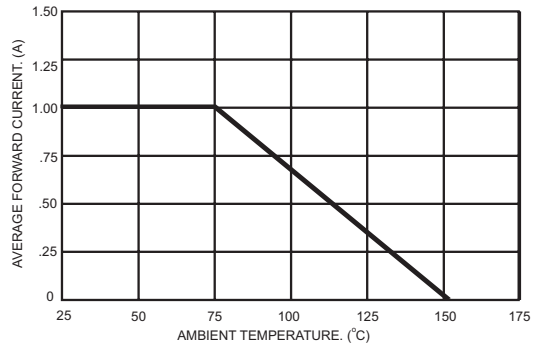


FIG.3- TYPICAL JUNCTION CAPACITANCE

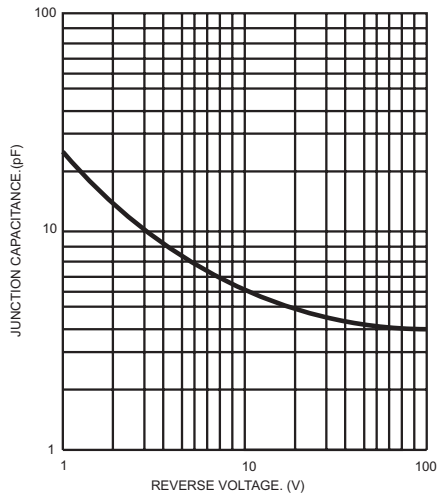


FIG.4- TYPICAL FORWARD CHARACTERISTICS

