# LL4001G THRU LL4007G

1.0 AMP Surface Mount Glass Passivated Silicon Rectifiers

Voltage Range
50 to 1000 Volts
Current
1.0 Ampere

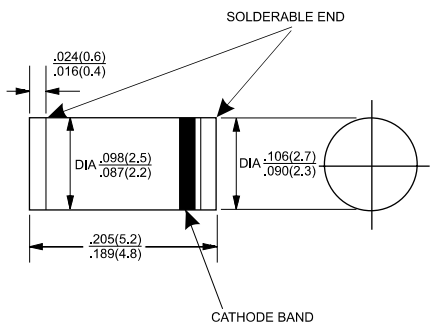
## Features

- ✧ Plastic package has carries underwriters Laboratory flammability classification 94V-0
- ✧ Surge overload rating to 30 Ampers peak
- ✧ Ideal for printed circuit board.
- ✧ Reliable low cost construction utilizing molded plastic technique results in in-expensive product.
- ✧ High temperature soldering guaranteed: 250°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 | LL 4001G | LL 4002G | LL 4003G | LL 4004G | LL 4005G | LL 4006G | LL 4007G | Units |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @$T_A$ = 75°C | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method ) | 30 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @1.0A | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A$=25°C<br>at Rated DC Blocking Voltage @ $T_A$=125°C | 5<br>100 | | | | | | | uA<br>uA |
| Typical Junction Capacitance ( Note 1 ) | 15 | | | | | | | pF |
| Typical Thermal Resistance R$\theta$JC (Note 2) | 50 | | | | | | | °C/W |
| Operating and Storage Temperature Range $T_J$,$T_{STG}$ | - 65 to + 150 | | | | | | | °C |

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient.

## RATINGS AND CHARACTERISTIC CURVES (LL4001G THRU LL4007G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

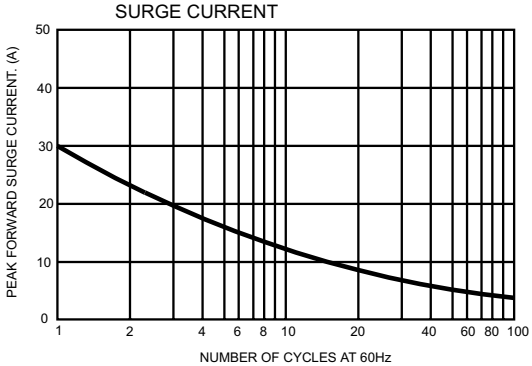



FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

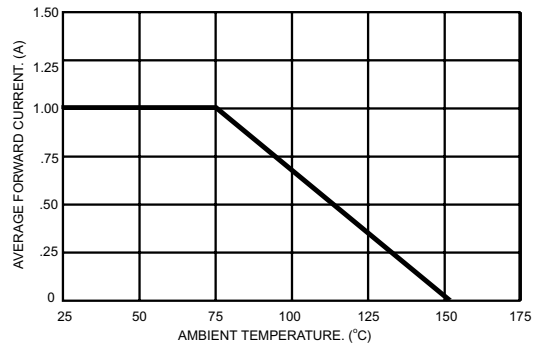



FIG.3- TYPICAL JUNCTION CAPACITANCE

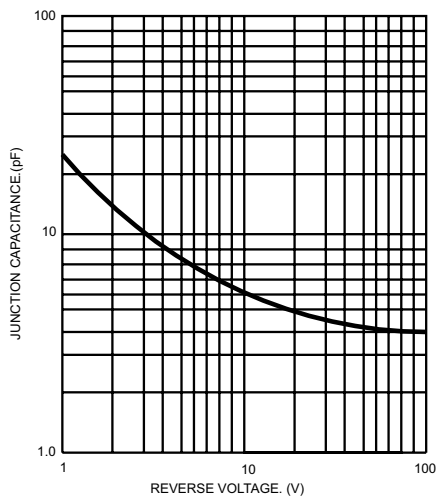



FIG.4- TYPICAL FORWARD CHARACTERISTICS