



# LL4001G THRU LL4007G

1.0 AMP Surface Mount Glass Passivated Silicon Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
1.0 Ampere

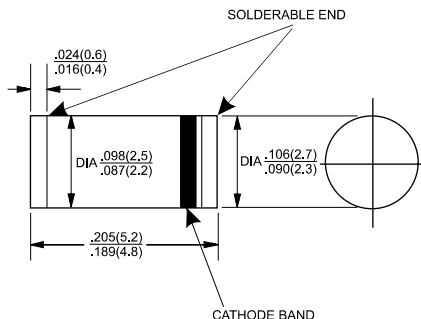
## Features

- ✧ 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: 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<br>4001G   | LL<br>4002G | LL<br>4003G | LL<br>4004G | LL<br>4005G | LL<br>4006G | LL<br>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<br>@T <sub>A</sub> = 75°C                                       | 1.0           |             |             |             |             |             |             | A        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method ) | 30            |             |             |             |             |             |             | A        |
| Maximum Instantaneous Forward Voltage<br>@1.0A                                                            | 1.1           |             |             |             |             |             |             | V        |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C<br>at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C | 5<br>100      |             |             |             |             |             |             | uA<br>uA |
| Typical Junction Capacitance ( Note 1 )                                                                   | 15            |             |             |             |             |             |             | pF       |
| Typical Thermal Resistance R <sub>θJC</sub> (Note 2)                                                      | 50            |             |             |             |             |             |             | °C/W     |
| Operating and Storage Temperature Range<br>T <sub>J</sub> , T <sub>STG</sub>                              | - 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

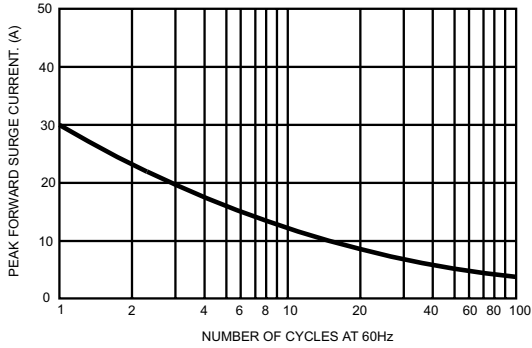


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

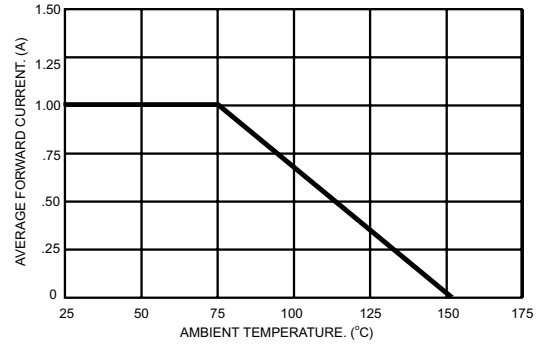


FIG.3- TYPICAL JUNCTION CAPACITANCE

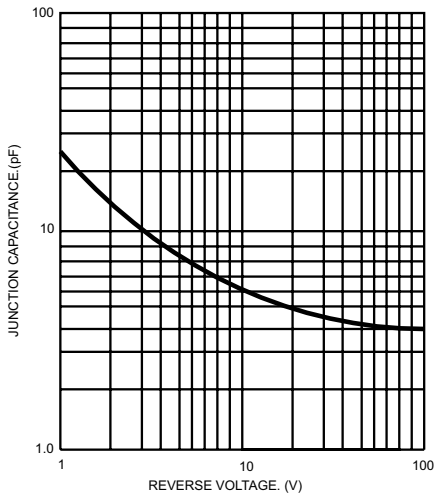


FIG.4- TYPICAL FORWARD CHARACTERISTICS

