



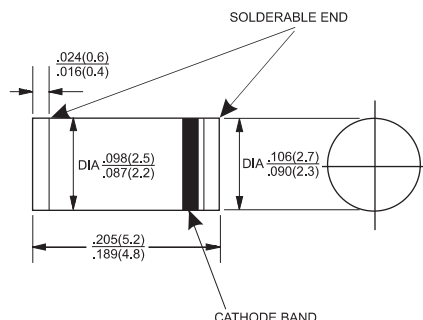
LL4001G - LL4007G

1.0AMP Surface Mount Glass Passivated Silicon Rectifiers

MELF

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

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 | | | | | | | μA μA |
| Typical Junction Capacitance (Note 1) | C_j | 15 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 50 | | | | | | | $^\circ\text{C/W}$ |
| 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

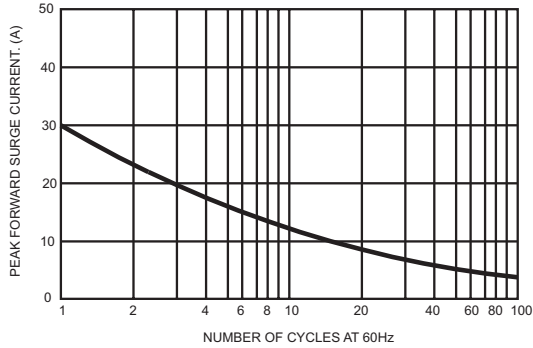


FIG.2- TYPICAL FORWARD CHARACTERISTICS

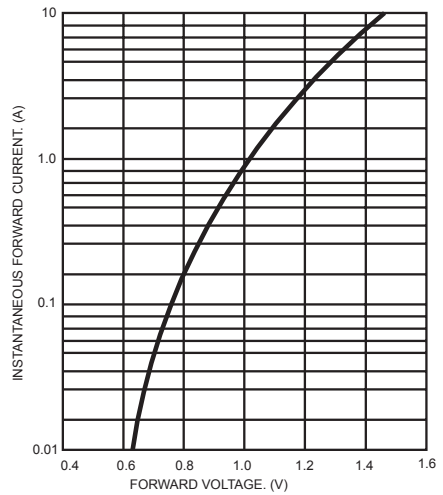


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

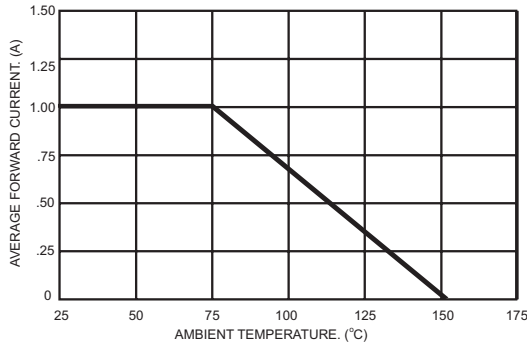


FIG.5- TYPICAL JUNCTION CAPACITANCE

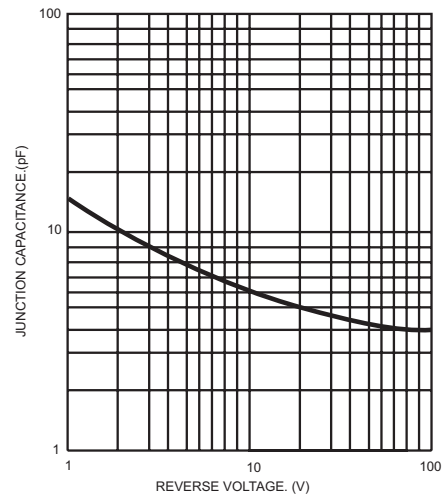


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

