

# LL4000G Series

## Power Diodes - Standard Recovery



### Features:

- Surge overload ratings to 30 amperes peak.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing moulded plastic technique results in inexpensive product.
- High temperature : 250°C/10 seconds at terminals.
- Soldering Guaranteed

### Mechanical Data:

Solderability per MIL-STD-750, method 208 at terminals.

Mounting Position : Any.

Weight : 0.12 gram

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

### Maximum Ratings

| Type Number                                                                                                | LL4001G     | LL4002G | LL4004G | LL4007G | Unit |
|------------------------------------------------------------------------------------------------------------|-------------|---------|---------|---------|------|
| Max. Recurrent Peak Reverse Voltage                                                                        | 50          | 100     | 400     | 1,000   | V    |
| Max. RMS Voltage                                                                                           | 35          | 70      | 280     | 700     |      |
| Max. DC Blocking Voltage                                                                                   | 50          | 100     | 400     | 1,000   |      |
| Max. Average Forward Rectified Current at T <sub>A</sub> = 75°C                                            | 1           |         |         |         | A    |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave A Superimposed on Rated Load (JEDEC Method)       | 30          |         |         |         |      |
| Max. Instantaneous Forward Voltage at 1A                                                                   | 1.1         |         |         |         | V    |
| Max. DC Reverse Current at T <sub>A</sub> = 25°C<br>at Rated DC Blocking Voltage at T <sub>A</sub> = 125°C | 5<br>100    |         |         |         | µA   |
| Typical Junction Capacitance (Note 1)                                                                      | 15          |         |         |         | pF   |
| Typical Thermal Resistance R <sub>θJC</sub> (Note 2)                                                       | 50          |         |         |         | °C/W |
| Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>                                  | -65 to +150 |         |         |         | °C   |

### Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC
2. Thermal resistance from junction to ambient.

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### Ratings and Characteristic Curves

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

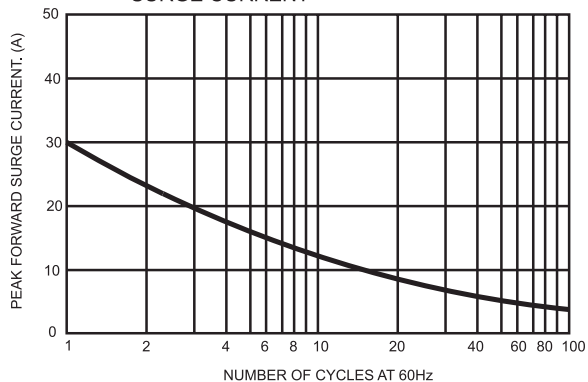


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

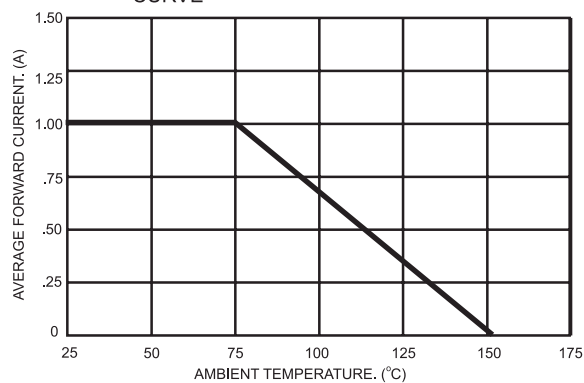


FIG.3- TYPICAL JUNCTION CAPACITANCE

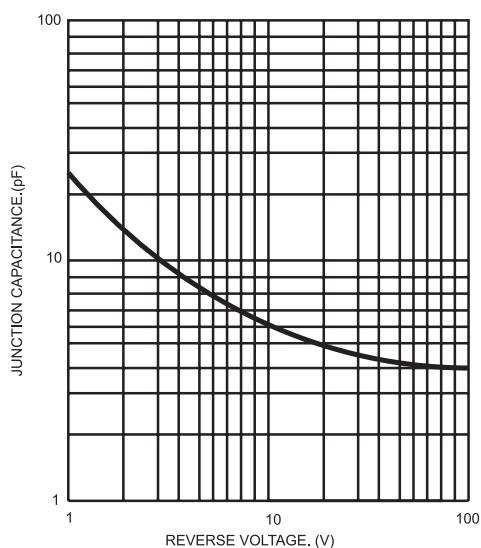
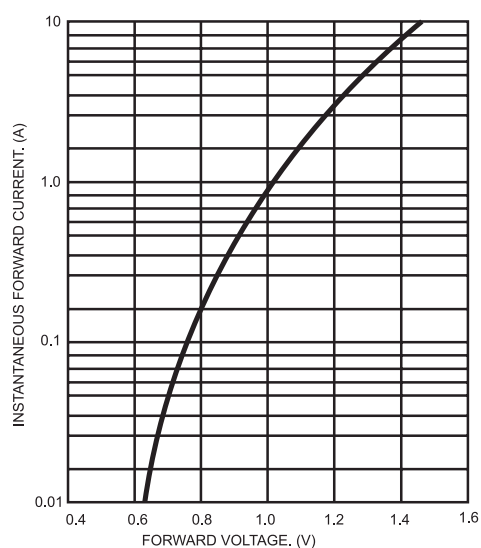


FIG.4- TYPICAL FORWARD CHARACTERISTICS

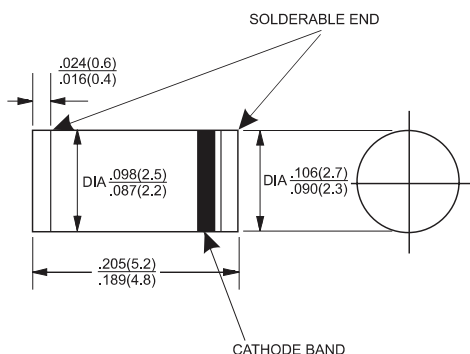


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### MELF



Dimensions : Inches (Millimetres)

### Part Number Table

| Description       | Part Number |
|-------------------|-------------|
| MELF Power Diodes | LL4001G     |
|                   | LL4002G     |
|                   | LL4004G     |
|                   | LL4007G     |

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