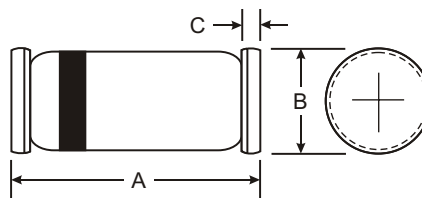


### Features

- Ideal for Fast Logic Applications
- Ultra Fast Switching
- High Reliability
- High Conductance

### Mechanical Data

- Case: MiniMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Marking: Cathode Band Only
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



| MiniMELF             |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 3.30 | 3.70 |
| B                    | 1.30 | 1.60 |
| C                    | 0.28 | 0.50 |
| All Dimensions in mm |      |      |

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic                                                                             | Symbol          | LL4150      | Unit             |
|--------------------------------------------------------------------------------------------|-----------------|-------------|------------------|
| Non-Repetitive Peak Reverse Voltage @ 5.0 $\mu\text{A}$                                    | $V_{RM}$        | 75          | V                |
| Peak Repetitive Reverse Voltage                                                            | $V_{RRM}$       | 50          | V                |
| Working Peak Reverse Voltage                                                               | $V_{RWM}$       |             |                  |
| DC Blocking Voltage                                                                        | $V_R$           |             |                  |
| RMS Reverse Voltage                                                                        | $V_{R(RMS)}$    | 35          | V                |
| Forward Continuous Current (Note 1)                                                        | $I_{FM}$        | 400         | mA               |
| Average Rectified Output Current (Note 1)                                                  | $I_O$           | 200         | mA               |
| Repetitive Peak Forward Current (Note 1)                                                   | $I_{FRM}$       | 600         | mA               |
| Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$<br>@ $t = 1.0\mu\text{s}$ | $I_{FSM}$       | 1.0<br>4.0  | A                |
| Power Dissipation (Note 1)                                                                 | $P_d$           | 500         | mW               |
| Thermal Resistance, Junction to Ambient Air (Note 1)                                       | $R_{\theta JA}$ | 300         | K/W              |
| Operating and Storage Temperature Range                                                    | $T_J, T_{STG}$  | -65 to +200 | $^\circ\text{C}$ |

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

| Characteristic               | Symbol   | Min                                  | Max                                  | Unit                | Test Condition                                                                                                     |
|------------------------------|----------|--------------------------------------|--------------------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------|
| Maximum Forward Voltage Drop | $V_{FM}$ | 0.54<br>0.66<br>0.76<br>0.82<br>0.87 | 0.62<br>0.74<br>0.86<br>0.92<br>1.00 | V                   | $I_F = 1.0\text{mA}$<br>$I_F = 10\text{mA}$<br>$I_F = 50\text{mA}$<br>$I_F = 100\text{mA}$<br>$I_F = 200\text{mA}$ |
| Maximum Peak Reverse Current | $I_{RM}$ | —                                    | 100                                  | nA<br>$\mu\text{A}$ | $T_A = 25^\circ\text{C}$<br>$T_A = 150^\circ\text{C}$                                                              |
| Junction Capacitance         | $C_j$    | —                                    | 2.5                                  | pF                  | $V_R = 0\text{V}$ , $f = 1.0\text{MHz}$                                                                            |
| Reverse Recovery Time        | $t_{rr}$ | —                                    | 4.0                                  | ns                  | $I_F = I_R = 200\text{mA}$ ,<br>$I_{rr} = 0.1 \times I_R$ , $R_L = 100\Omega$                                      |
| Forward Recovery Time        | $t_{fr}$ | —                                    | 10                                   | ns                  | $I_F = 200\text{mA}$ , $V_{FR} = 1.0\text{V}$                                                                      |

Note: 1. Valid provided that electrodes are kept at ambient temperature.