Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

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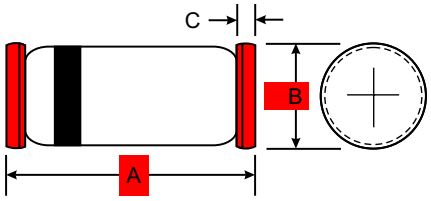
# LL4154

## SURFACE MOUNT FAST SWITCHING DIODE

## Features

- Fast Switching Speed
- Suitable for General Logic Applications
- High Conductance




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

## 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.)

## Maximum Ratings

@ $T_A$ = 25°C unless otherwise specified

| Characteristic | Symbol | LL4154 | Unit |
|---|---|---|---|
| Non-Repetitive Peak Reverse Voltage | $V_{RM}$ | 35 | V |
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 25 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 18 | V |
| Average Rectified Output Current (Note 1) | $I_O$ | 150 | mA |
| Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s<br>@ t = 1.0μs | $I_{FSM}$ | 0.5<br>2.0 | 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 +175 | °C |

## Electrical Characteristics

@ $T_A$ = 25°C unless otherwise specified

| Characteristic | Symbol | Min | Max | Unit | Test Condition |
|---|---|---|---|---|---|
| Maximum Forward Voltage Drop | $V_{FM}$ | — | 1.0 | V | $I_F$ = 30mA |
| Maximum Peak Reverse Current | $I_{RM}$ | — | 100 | nA<br>μA | $V_R$ = 25V<br>$V_R$ = 25V, $T_j$ = 150°C |
| Junction Capacitance | $C_j$ | — | 4.0 | pF | $V_R$ = 0V, f = 1.0MHz |
| Reverse Recovery Time | $t_{rr}$ | — | 4.0 | ns | $I_F$ = $I_R$ = 10mA,<br>$I_{rr}$ = 0.1 x $I_R$, $R_L$ = 100Ω |

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

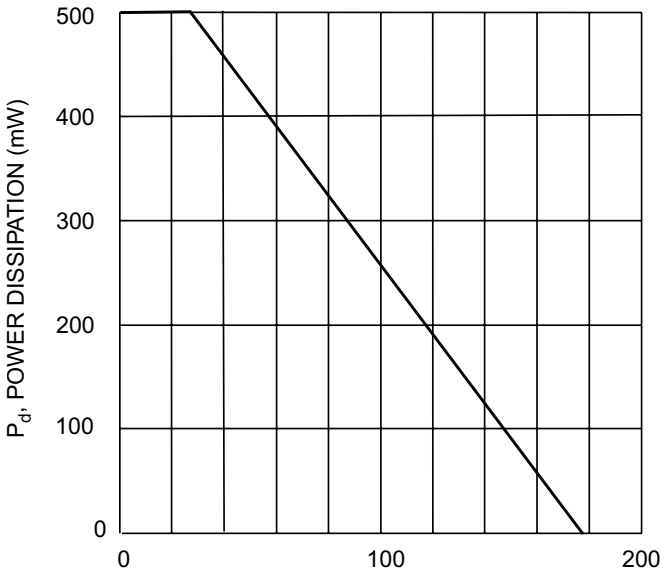



Fig. 1 Power Derating Curve

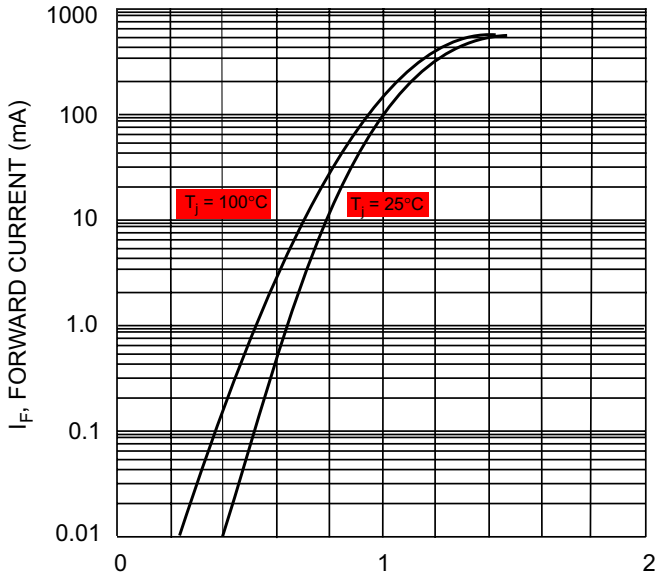



Fig. 2 Forward Characteristics

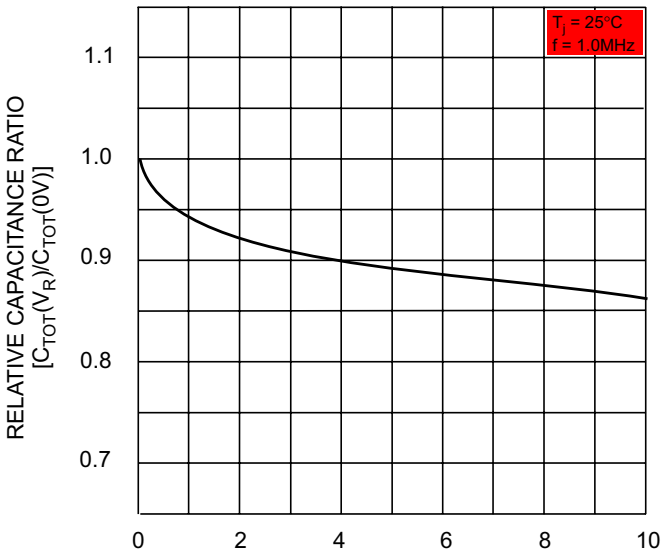



Fig. 3 Relative Capacitance Variation

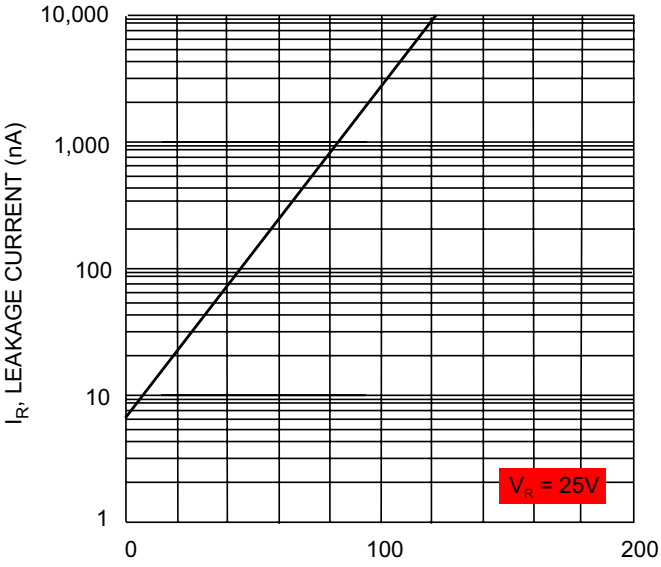



Fig. 4 Leakage Current vs Junction Temperature