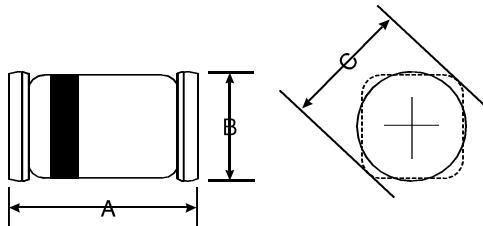


## Features

Fast Switching Speed  
 Surface Mount Package Ideally Suited for Automatic Insertion  
 For General Purpose Switching Applications  
 High Conductance



## Mechanical Data

Case: MicroMELF, Glass  
 Terminals: Solderable per MIL-STD-202, Method 208  
 Polarity: Cathode Band  
 Marking: Cathode Band Only  
 Weight: 0.012 grams (approx.)

| MicroMELF |      |         |
|-----------|------|---------|
| Dim       | Min  | Max     |
| A         | 1.8  | 2.0     |
| B         | 1.20 | 1.25    |
| C         | 1.35 | Typical |

All Dimensions in mm

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

| Characteristic   | Symbol                          | MCL4154     | 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  | $V_{R(RMS)}$                    | 17          | V    |
| Forward Continuous Current (Note 1)  | $I_{FM}$                        | 200         | mA   |
| Average Rectified Output Current (Note 1)  | $I_O$                           | 100         | mA   |
| Non-Repetitive Peak Forward Surge Current @ $t = 1.0 \text{ s}$                        | $I_{FSM}$                       | 2.0         | A    |
| Power Dissipation  | $P_d$                           | 500         | mW   |
| Thermal Resistance Junction to Ambient Air (Note 1)                                    | $R_{JA}$                        | 300         | K/W  |
| Operating and Storage Temperature Range  | $T_j, T_{STG}$                  | -65 to +175 | C    |

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

| Characteristic               | Symbol   | Min        | Max     | Unit  | Test Condition  |
|------------------------------|----------|------------|---------|---|---|
| Maximum Forward Voltage      | $V_{FM}$ |            | 1.0     | V   | $I_F = 30\text{mA}$   |
| Maximum Peak Reverse Current | $I_{RM}$ | 100<br>100 | nA<br>A | $V_R = 25\text{V}$<br>$V_R = 25\text{V}, T_j = 150^\circ\text{C}$ |   |
| Junction Capacitance         | $C_j$    |            | 4.0     | pF  | $V_R = 0, f = 1.0\text{MHz}$  |
| Reverse Recovery Time        | $t_{rr}$ |            | 2.0     | ns  | $I_F = I_R = 10\text{mA}$<br>$I_{rr} = 0.1 \times I_R, R_L = 100\Omega$ |

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

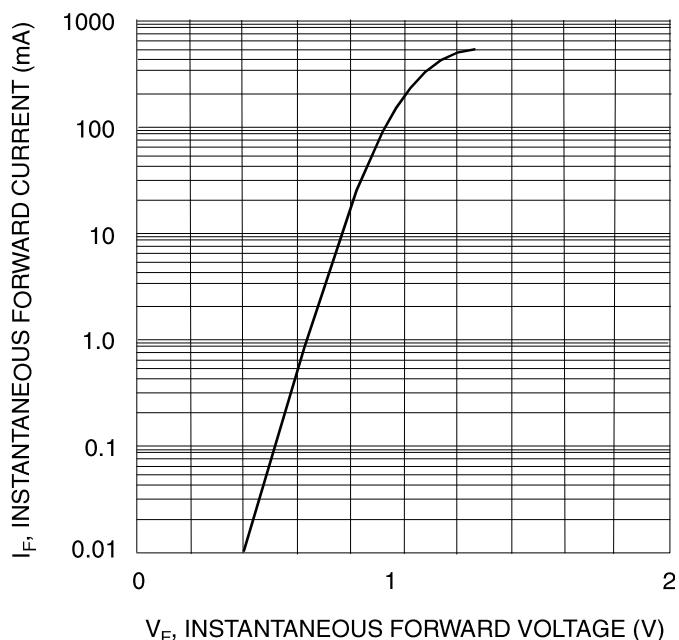


Fig. 1 Forward Characteristics

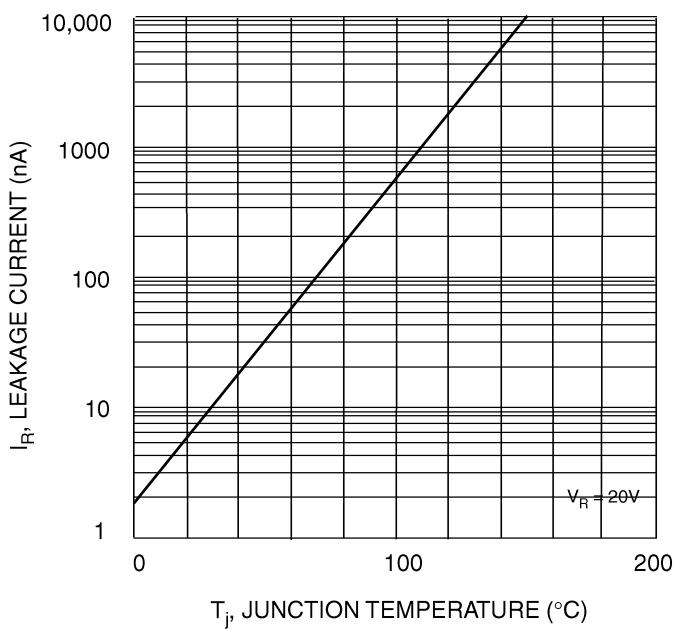


Fig. 2 Leakage Current vs Junction Temperature