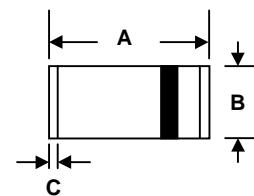


## Silicon Epitaxial Planar Switching Diode

Fast switching diode in MiniMELF case especially suited for automatic surface mounting.

Identical electrically to standard 1N4448.



| MiniMELF |      |      |
|----------|------|------|
| Dim      | MIn  | Max  |
| A        | 3.30 | 3.60 |
| B        | 1.40 | 1.50 |
| C        | 0.25 | 0.33 |

All Dimensions in mm

Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                                  | Symbol      | Value             | Unit             |
|--------------------------------------------|-------------|-------------------|------------------|
| Peak Reverse Voltage                       | $V_{RM}$    | 100               | V                |
| Reverse Voltage                            | $V_R$       | 75                | V                |
| Average Rectified Forward Current          | $I_{F(AV)}$ | 150               | mA               |
| Surge Forward Current at $t < 1 \text{ s}$ | $I_{FSM}$   | 500               | mA               |
| Power Dissipation                          | $P_{tot}$   | 500 <sup>1)</sup> | mW               |
| Junction Temperature                       | $T_j$       | 175               | $^\circ\text{C}$ |
| Storage Temperature Range                  | $T_{stg}$   | - 65 to + 175     | $^\circ\text{C}$ |

<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.

Characteristics at  $T_a = 25^\circ\text{C}$ 

| Parameter                                                                                                                         | Symbol                  | Min.        | Max.          | Unit                                 |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------|---------------|--------------------------------------|
| Forward Voltage<br>at $I_F = 5 \text{ mA}$<br>at $I_F = 100 \text{ mA}$                                                           | $V_F$                   | 0.62<br>-   | 0.72<br>1     | V                                    |
| Reverse Leakage Current<br>at $V_R = 20 \text{ V}$<br>at $V_R = 75 \text{ V}$<br>at $V_R = 20 \text{ V}, T_j = 150^\circ\text{C}$ | $I_R$<br>$I_R$<br>$I_R$ | -<br>-<br>- | 25<br>5<br>50 | nA<br>$\mu\text{A}$<br>$\mu\text{A}$ |
| Reverse Breakdown Voltage<br>at $I_R = 100 \mu\text{A}$                                                                           | $V_{(BR)R}$             | 100         | -             | V                                    |
| Capacitance<br>at $V_R = 0, f = 1 \text{ MHz}$                                                                                    | $C_{tot}$               | -           | 4             | pF                                   |
| Reverse Recovery Time<br>at $I_F = 10 \text{ mA}$ to $I_R = 1 \text{ mA}, V_R = 6 \text{ V}, R_L = 100 \Omega$                    | $t_{rr}$                | -           | 4             | ns                                   |

