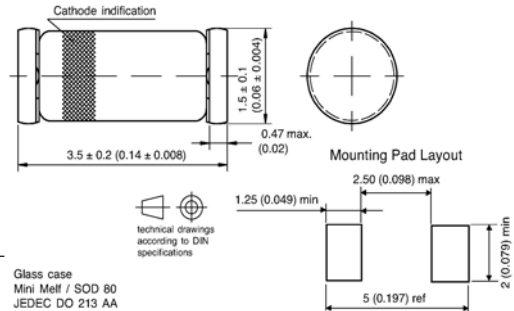


Features

- ◆ For general purpose applications.
- ◆ This diode features low turn-on voltage.
- ◆ The devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.
- ◆ This diode is also available in the DO-35 case with type designation BAT85.

Mechanical Data

- ◆ Case: MiniMELF Glass Case (SOD-80)
- ◆ Weight: approx. 0.05 grams
- ◆ Cathode Band Color: Green



Maximum Ratings and Thermal Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted.)

| Parameter | Symbol | Value | Unit |
|---|-----------------|--------------------|--------------------|
| Continuous reverse voltage | V_R | 30 | Volts |
| Forward continuous current at $T_{amb}=25^\circ\text{C}$ | I_F | 200 ⁽¹⁾ | mA |
| Peak forward current at $T_{amb}=25^\circ\text{C}$ | I_{FM} | 300 ⁽¹⁾ | mA |
| Surge forward current at $t_p < 1\text{s}$, $T_{amb}=25^\circ\text{C}$ | I_{FSM} | 600 ⁽¹⁾ | mA |
| Power dissipation at $T_{amb}=65^\circ\text{C}$ | P_{tot} | 200 ⁽¹⁾ | mW |
| Thermal resistance junction to ambient air | $R_{\theta JA}$ | 430 ⁽¹⁾ | $^\circ\text{C/W}$ |
| Junction temperature | T_J | 125 | $^\circ\text{C}$ |
| Storage temperature range | T_S | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics

($T_J=25^\circ\text{C}$ unless otherwise noted.)

| Parameter | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------------|-------------|---|------|------|--------------------------|---------------|
| Reverse breakdown voltage | $V_{(BR)R}$ | $I_R=10\mu\text{A}$ (pulsed) | 30 | - | - | Volts |
| Leakage current | I_R | $V_R=25\text{V}$ | - | 0.2 | 2 | μA |
| Forward voltage | V_F | Pulse Test $t_p < 300\mu\text{s}$ $I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$ | - | - | 0.24 0.32 0.4 - | Volt |
| Capacitance | C_{tot} | $V_R=1\text{V}$, $f=1\text{MHz}$ | - | - | 10 | pF |
| Reverse recovery time | t_{rr} | $I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_R=1\text{mA}$ | - | - | 5 | ns |

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