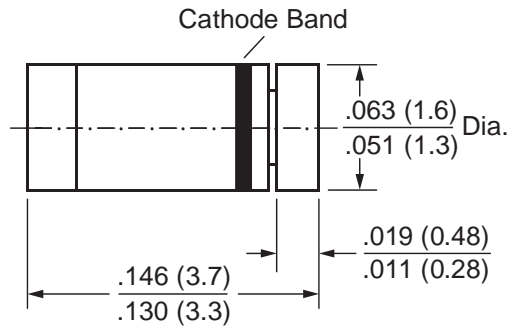


MiniMELF (SOD-80C)



Dimensions in inches and (millimeters)

Features

- For general purpose applications
- Metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing and coupling diodes for fast switching and low logic level applications.
- This diode is also available in the DO-35 case with type designation 1N5711 and 1N6263.

Mechanical Data

Case: MiniMELF Glass Case (SOD-80C)

Weight: approx. 0.05g

Cathode Band Color: Green

Packaging Codes/Options:

D1/10K per 13" reel (8mm tape), 20K/box

D2/2.5K per 7" reel (8mm tape), 20K/box

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbol | Value | Unit |
|---|-----------|--------------------|------|
| Peak Inverse Voltage LL5711 LL6263 | V_{RRM} | 70 60 | V |
| Power Dissipation (Infinite Heatsink) | P_{tot} | 400 ⁽¹⁾ | mW |
| Maximum Single Cycle Surge 10μs Square Wave | I_{FSM} | 2.0 | A |
| Junction Temperature | T_j | 125 | °C |
| Storage Temperature Range | T_s | -55 to +150 | °C |

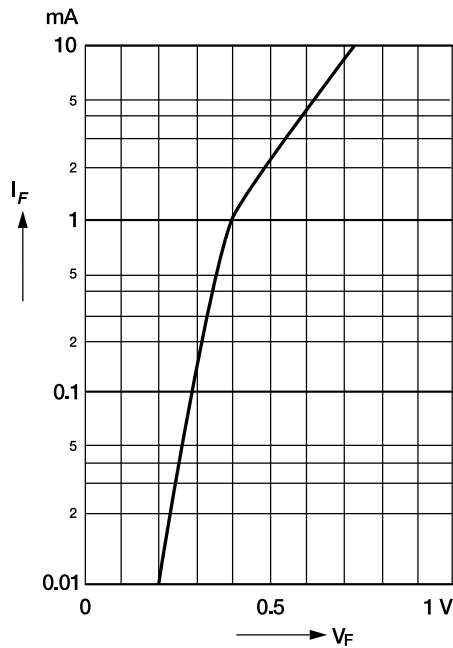
Electrical Characteristics ($T_j = 25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|---|-------------|--|----------|--------|-------------|------|
| Reverse Breakdown Voltage LL5711 LL6263 | $V_{(BR)R}$ | $I_R = 10\mu\text{A}$ | 70 60 | — — | — — | V |
| Leakage Current | I_R | $V_R = 50\text{V}$ | — | — | 200 | nA |
| Forward Voltage Drop | V_F | $I_F = 1.0\text{mA}$ $I_F = 15\text{mA}$ | — — | — — | 0.41 1.0 | V |
| Junction Capacitance | C_{tot} | $V_R = 0\text{V}$, $f = 1\text{MHz}$ | — | — | 2.2 | pF |
| Reverse Recovery Time | t_{rr} | $I_F = I_R = 5\text{mA}$, recover to 0.1 I_R | — | — | 1 | ns |

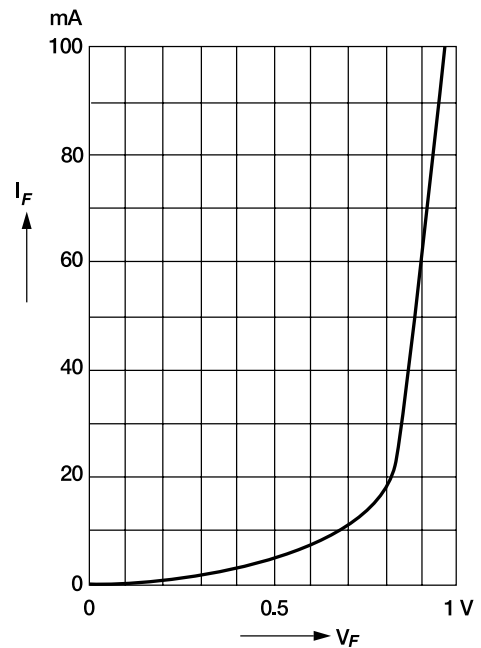
Note: (1) Valid provided that electrodes are kept at ambient temperature.

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

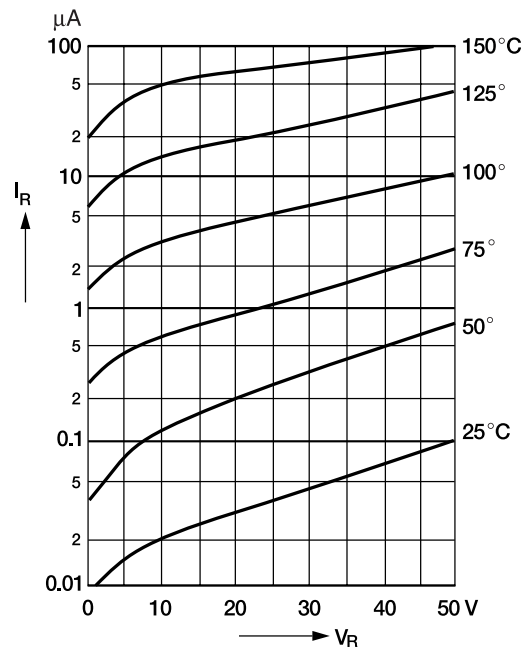
Typical variation of fwd. current
vs. fwd. voltage for primary conduction
through the Schottky barrier



Typical forward conduction curve
of combination Schottky barrier
and PN junction guard ring



Typical variation of reverse current
at various temperatures



Typical capacitance curve as a
function of reverse voltage

