
Features

- For general purpose applications
- This diode features low turn-on voltage and high breakdown voltage. This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges

Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)



| LL34/ SOD-80 | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 3.30 | 3.70 |
| B | 1.30 | 1.60 |
| C | 0.28 | 0.50 |
| All Dimensions in mm | | |

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

| Characteristic | Symbol | Value | Unit |
|--|-----------|------------------|------------------|
| Peak reverse voltage | V_{RRM} | 15 | V |
| Forward continuous current | I_F | 30 ¹⁾ | mA |
| Surge non repetitive forward current $t_p \leq 1s$ | I_{FSM} | 60 | mA |
| Junction temperature | T_J | -65 ---+ 150 | $^\circ\text{C}$ |
| Storage temperature range | T_{STG} | -65 ---+ 150 | $^\circ\text{C}$ |

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

ELECTRICAL CHARACTERISTICS (Ratings at 25°C ambient temperature unless otherwise specified)

| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|---|-----------------|------|------|--------------------|------|
| Reverse breakdown voltage @ $I_R=10\mu\text{A}$ | V_R | 15 | | | V |
| Leakage current @ $V_R=6V$ | I_R | | | 100 | nA |
| Forward voltage drop @ $I_F=1.0\text{mA}$ Test pulse: $t_p \leq 300\mu\text{s}$, $< 2\%$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ | V_F | | | 0.38 0.5 1.0 | V |
| Junction capacitance @ $V_R=1.0V, f=1\text{MHz}$ | C_J | | | 1.1 | pF |
| Thermal resistance junction to ambient air | $R_{\theta JA}$ | | | 400 | K/W |



Ratings AND Characteristic Curves LL45

FIG.1 – FORWARD CURRENT VERSUS FORWARD VOLTAGE AT DIFFERENT TEMPERATURES (TYPICAL VALUES)

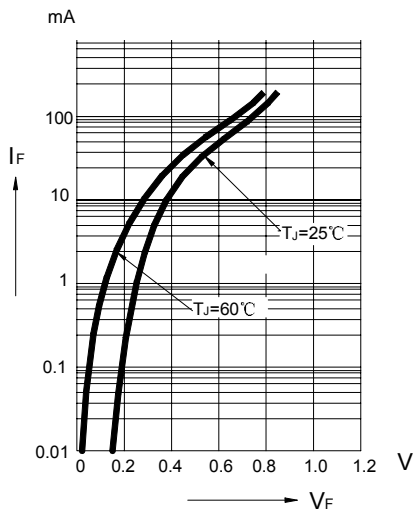


FIG.2 – REVERSE CURRENT VERSUS JUNCTION TEMPERATURE

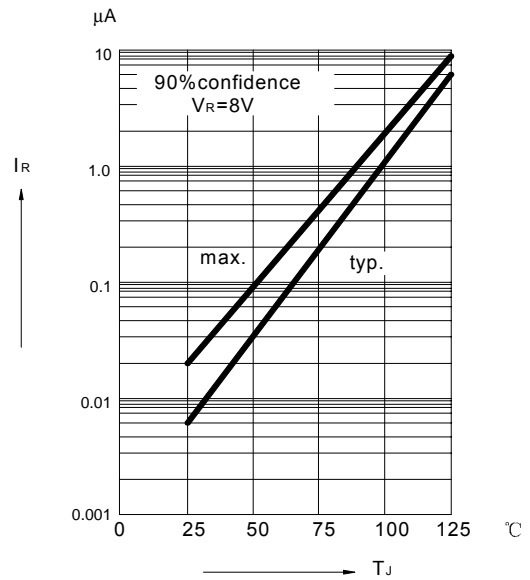


FIG.3 – REVERSE CURRENT VERSUS CONTINUOUS REVERSE VOLTAGE

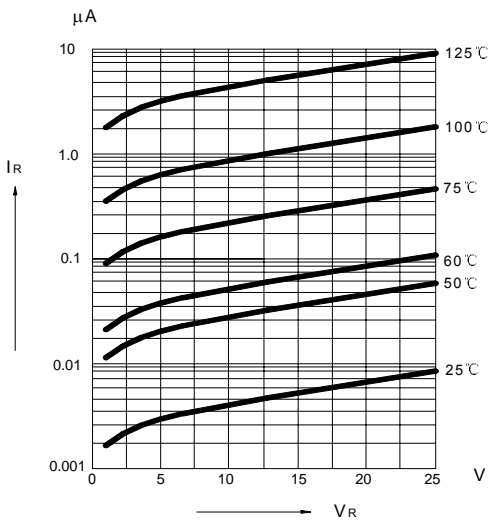


FIG.4 – FORWARD CURRENT VERSUS FORWARD VOLTAGE (TYPICAL VALUES)

