

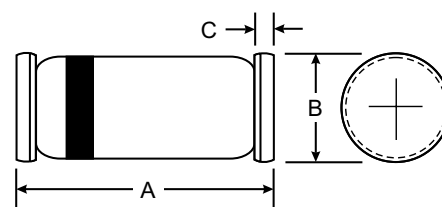


Features

- Silicon Planar Diode

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

| Parameter | Test condition | Symbol | Value | Unit |
|--------------------------------------|-----------------------|-----------|-------|------|
| Peak reverse voltage, non repetitive | | V_{RSM} | 80 | V |
| Reverse voltage | | V_R | 50 | V |
| Peak forward surge current | $t_p = 1 \mu\text{s}$ | I_{FSM} | 2 | A |
| Repetitive peak forward current | | I_{FRM} | 450 | mA |
| Forward continuous current | | I_F | 200 | mA |
| Power dissipation | | P_V | 500 | mW |

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

| Parameter | Test condition | Symbol | Value | Unit |
|--|---------------------------------------|------------|---------------|------------------|
| Thermal resistance junction to ambient air | on PC board 50 mm x 50 mm x 1.6 mm | R_{thJA} | 500 | K/W |
| Junction lead | $T_L = \text{constant}$ | R_{thJL} | 350 | K/W |
| Junction temperature | | T_j | 175 | $^\circ\text{C}$ |
| Storage temperature range | | T_{stg} | - 55 to + 175 | $^\circ\text{C}$ |

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

| Parameter | Test condition | Symbol | Min | Typ. | Max | Unit |
|-----------------------|---|------------|-----|------|------|---------------|
| Forward voltage | $I_F = 50 \text{ mA}$ | V_F | | | 1100 | mV |
| Reverse current | $V_R = 50 \text{ V}$ | I_R | | | 1 | μA |
| | $V_R = 20 \text{ V}$ | I_R | | | 50 | nA |
| | $V_R = 20 \text{ V}, T_j = 150^\circ\text{C}$ | I_R | | | 50 | μA |
| Breakdown voltage | $I_R = 100 \mu\text{A}$ | $V_{(BR)}$ | 80 | | | V |
| Reverse recovery time | $I_F = 10 \text{ mA}, I_R = 10 \text{ mA},$ $i_R = 1 \text{ mA}$ | t_{rr} | | | 20 | ns |
| Diode capacitance | $V_R = 0, f = 1 \text{ MHz}$ | C_D | | | 4 | pF |