

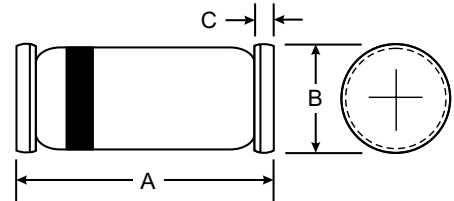


Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop

Mechanical Data

- Case: LL34
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: MiniMELF 0.05 grams
- Marking: Cathode Band Only



| 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 | | |

Absolute Maximum Ratings $T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

| Parameter | Test condition | Part | Symbol | Value | Unit |
|---------------------------------|-------------------------------|--------|-----------|-------|------|
| Reverse voltage | | LS101A | V_R | 60 | V |
| | | LS101B | V_R | 50 | V |
| | | LS101C | V_R | 40 | V |
| Peak forward surge current | $t_p = 10\text{ }\mu\text{s}$ | | I_{FSM} | 2 | A |
| Repetitive peak forward current | | | I_{FRM} | 150 | mA |
| Forward current | | | I_F | 30 | mA |

Thermal Characteristics $T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

| Parameter | Test condition | Symbol | Value | Unit |
|---------------------------|-----------------------------------|------------|---------------|--------------------|
| Junction ambient | on PC board 50 mmx50 mmx1.6 mm | R_{thJA} | 320 | K/W |
| Junction temperature | | T_j | 125 | $^{\circ}\text{C}$ |
| Storage temperature range | | T_{stg} | - 65 to + 150 | $^{\circ}\text{C}$ |

Electrical Characteristics

$T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

| Parameter | Test condition | Part | Symbol | Min | Typ. | Max | Unit |
|---------------------------|--------------------------------------|--------|-------------|-----|------|------|------|
| Reverse Breakdown Voltage | $I_R = 10\text{ }\mu\text{A}$ | LS101A | $V_{(BR)R}$ | 60 | | | V |
| | | LS101B | $V_{(BR)R}$ | 50 | | | V |
| | | LS101C | $V_{(BR)R}$ | 40 | | | V |
| Leakage current | $V_R = 50\text{ V}$ | LS101A | I_R | | | 200 | nA |
| | $V_R = 40\text{ V}$ | LS101B | I_R | | | 200 | nA |
| | $V_R = 30\text{ V}$ | LS101C | I_R | | | 200 | nA |
| Forward voltage drop | $I_F = 1\text{ mA}$ | LS101A | V_F | | | 0.41 | V |
| | | LS101B | V_F | | | 0.4 | V |
| | | LS101C | V_F | | | 0.39 | V |
| | $I_F = 15\text{ mA}$ | LS101A | V_F | | | 1 | V |
| | | LS101B | V_F | | | 0.95 | V |
| | | LS101C | V_F | | | 0.9 | V |
| Diode capacitance | $V_R = 0\text{ V}, f = 1\text{ MHz}$ | LS101A | C_D | | | 2.0 | pF |
| | | LS101B | C_D | | | 2.1 | pF |
| | | LS101C | C_D | | | 2.2 | pF |

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

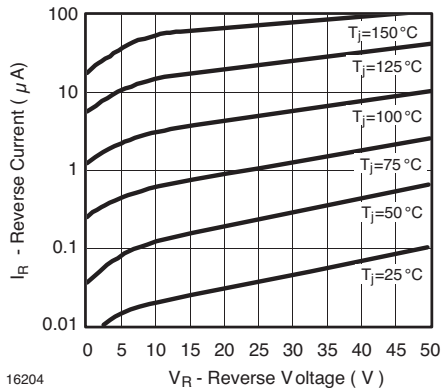


Fig. 1 Reverse Current vs. Reverse Voltage

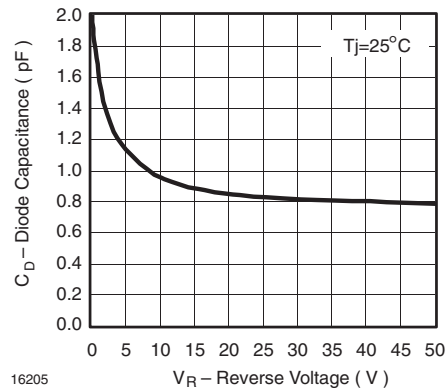


Fig. 2 Diode Capacitance vs. Reverse Voltage

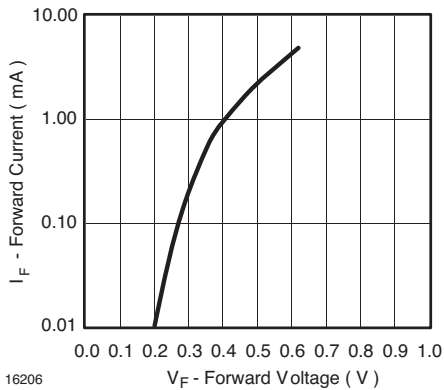


Fig. 3 Forward Current vs. Forward Voltage