

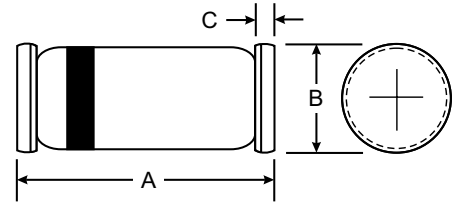


Features

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

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 and Thermal Characteristics (Rating at 25 °C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Value | Unit |
|---|------------------|-----------------------------|------|
| Repetitive Peak Reverse Voltage | LL101A | 60 | V |
| | LL101B | 50 | |
| | LL101C | 40 | |
| Maximum Single Cycle Surge 10μs Square Wave | I _{FSM} | 2 | A |
| Power Dissipation (Infinite Heatsink) | P _D | 400 ⁽¹⁾ | mW |
| Thermal Resistance Junction to Ambient Air | R _{θJA} | 300 ⁽¹⁾ | °C/W |
| Junction Temperature | T _J | 125 ⁽¹⁾ | °C |
| Storage temperature range | T _S | -55 to + 150 ⁽¹⁾ | °C |

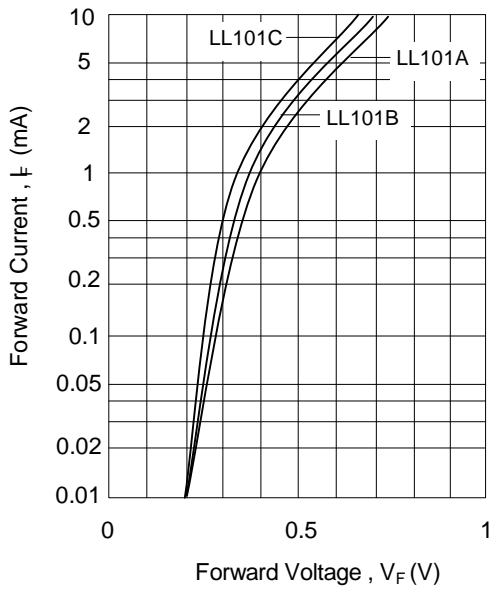
Note: (1) Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (T_J = 25°C unless otherwise noted)

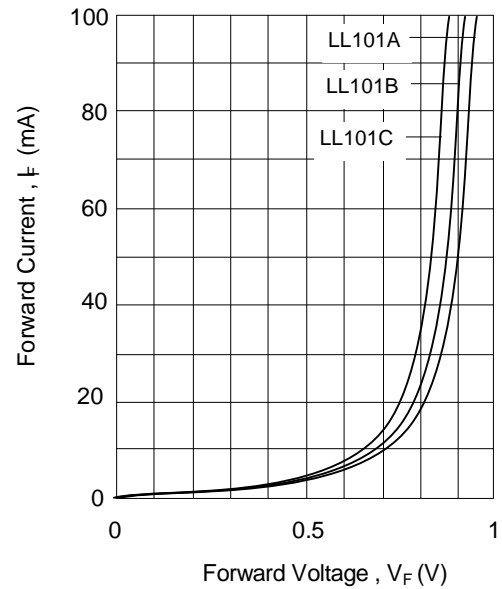
| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit | |
|---------------------------|-----------------------|------------------------|---|-----|-----|------|----|
| Reverse Breakdown Voltage | V _{(BR)R} | I _R = 10 μA | LL101A | 60 | - | - | V |
| | | | LL101B | 50 | - | - | |
| | | | LL101C | 40 | - | - | |
| Reverse Current | I _R | V _R = 50 V | - | - | 10 | μA | |
| | | V _R = 40 V | - | - | 10 | | |
| | | V _R = 30 V | - | - | 10 | | |
| Forward Voltage Drop | V _F | I _F = 1mA | LL101A | - | - | 0.41 | V |
| | | | LL101B | - | - | 0.40 | |
| | | | LL101C | - | - | 0.39 | |
| | | I _F = 15mA | LL101A | - | - | 1.00 | |
| | | | LL101B | - | - | 0.95 | |
| LL101C | - | - | 0.90 | | | | |
| | Reverse Recovery Time | T _{rr} | I _F = I _R = 5mA , recover to 0.1I _R | - | - | 1.0 | ns |

RATING AND CHARACTERISTIC CURVES (LL101A - LL101C)

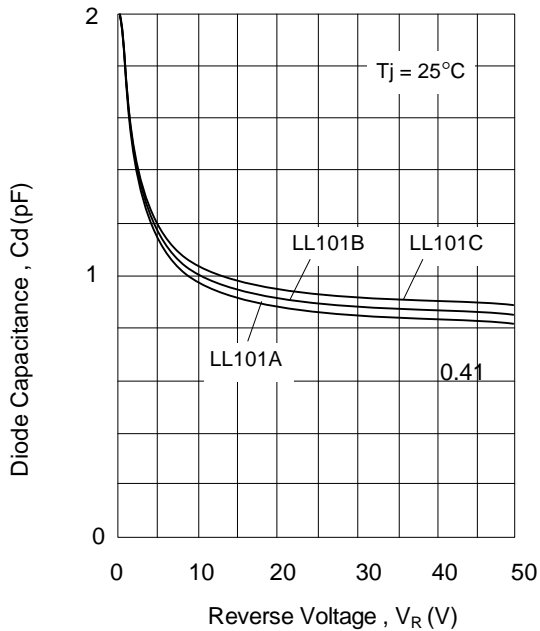
Typical variation of forward current and forward voltage for primary conduction through the schottky barrier



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



Typical capacitance curve as a function of reverse Voltage



Typical variation of reverse current at various temperatures

