

200 mW Surface Mount LL-34
Hermetically Sealed Glass Fast Switching
Schottky Barrier Diode



SURFACE MOUNT
LL34

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

| Symbol | Parameter | Value | Units |
|-------------|-----------------------------------|-------------|------------------|
| P_D | Power Dissipation | 200 | mW |
| T_{STG} | Storage Temperature Range | -65 to +125 | $^\circ\text{C}$ |
| T_J | Operating Junction Temperature | +125 | $^\circ\text{C}$ |
| V_{RRM} | Repetitive Peak Reverse Voltage | 30 | V |
| V_R | Maximum DC Blocking Voltage | 30 | V |
| $I_{F(AV)}$ | Average Forward Rectified Current | 200 | mA |
| I_{FSM} | Peak Forward Surge Current | 4 | A |

These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING DIAGRAM



Cathode Band Color : Black

Specification Features:

- Low Forward Voltage Drop
- LL-34 (Mini-MELF) Package (JEDEC)
- Surface Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
- RoHS Compliant
- Matte Tin (Sn) Terminal Finish
- Color band Indicates Negative Polarity

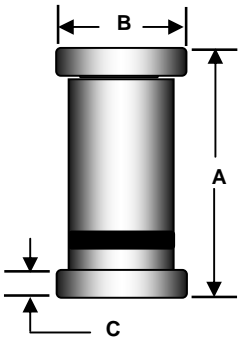


ELECTRICAL SYMBOL

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

| Symbol | Parameter | Test Condition | Limits | | Unit |
|----------|-------------------------|---|-------------|------|-------|
| | | | Min | Max | |
| B_V | Breakdown Voltage | $I_R=100\mu\text{A}$ | 30 | | Volts |
| I_R | Reverse Leakage Current | $V_R=25\text{V}$ | | 500 | nA |
| V_F | Forward Voltage | LLBAT42 $I_F=10\text{mA}$ | 0.26 | 0.40 | Volts |
| | | $I_F=50\text{mA}$ | | 0.65 | |
| | | LLBAT43 $I_F=2\text{mA}$ | | 0.33 | |
| | | $I_F=15\text{mA}$ | | 0.45 | |
| | | LLBAT42, LLBAT43 $I_F=200\text{mA}$ | | 1.0 | |
| T_{RR} | Reverse Recovery Time | $I_F=I_R=10\text{mA}$ $R_L=100\Omega$ $I_{RR}=1\text{mA}$ | 5 (Typical) | | nS |
| C | Capacitance | $V_R=1\text{V}, f=1\text{MHz}$ | 7 (Typical) | | pF |

Package Outline

| Package | Case Outline | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|--------|-------|--|-----|-------|--|--|--|-------------|--|--------|--|-----|-----|-----|-----|---|------|------|-------|-------|---|------|------|-------|-------|---|------|------|-------|-------|
| LL34 |  | <table border="1"> <thead> <tr> <th rowspan="3">DIM</th> <th colspan="4">LL-34</th> </tr> <tr> <th colspan="2">Millimeters</th> <th colspan="2">Inches</th> </tr> <tr> <th>Min</th> <th>Max</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>3.30</td> <td>3.50</td> <td>0.130</td> <td>0.138</td> </tr> <tr> <td>B</td> <td>1.40</td> <td>1.50</td> <td>0.055</td> <td>0.059</td> </tr> <tr> <td>C</td> <td>0.35</td> <td>0.50</td> <td>0.014</td> <td>0.020</td> </tr> </tbody> </table> | | | | DIM | LL-34 | | | | Millimeters | | Inches | | Min | Max | Min | Max | A | 3.30 | 3.50 | 0.130 | 0.138 | B | 1.40 | 1.50 | 0.055 | 0.059 | C | 0.35 | 0.50 | 0.014 | 0.020 |
| DIM | LL-34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Millimeters | | Inches | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min | Max | Min | Max | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | 3.30 | 3.50 | 0.130 | 0.138 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | 1.40 | 1.50 | 0.055 | 0.059 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 0.35 | 0.50 | 0.014 | 0.020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Notes:

1. All dimensions are within DO213AC JEDEC standard.
2. LL-34 polarity denoted by cathode band.

NOTICE

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