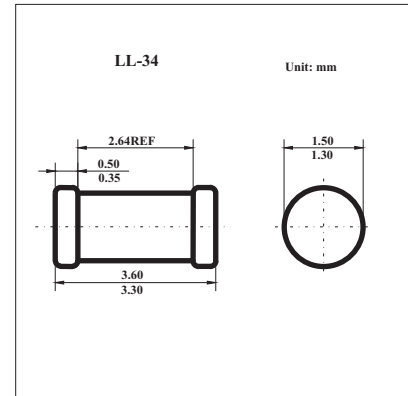


Surface Mount Switching Diode

BAV103

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---------------------------------------------------------------|-----------------|-------------|------|
| Repetitive Peak Reverse Voltage | VRRM | 250 | V |
| Working Peak Reverse Voltage | VRWM | 200 | V |
| DC Blocking Voltage | VR | 200 | V |
| RMS Reverse Voltage | VR(RMS) | 141 | V |
| Average Rectified Output Current *1 | Io | 125 | mA |
| Forward Continuous Current *1 | IFM | 250 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$ | IFSM | 1 | A |
| Power Dissipation | PD | 500 | mW |
| Thermal Resistance Junction to Ambient Air *1 | $R_{\theta JA}$ | 300 | K/W |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +175 | °C |

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

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|----------------------------------------------------------|--------|-----------------------------------------------------------------------|-----|-----|-----------|---------------------|
| Maximum Forward Voltage | VFM | $I_F = 100\text{mA}$ | | | 1 | V |
| Maximum Peak Reverse Current @ Rated DC Blocking Voltage | IRM | $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$ | | | 100 15 | nA μA |
| Junction Capacitance | Cj | $V_R = 0, f = 1.0\text{MHz}$ | | | 1.5 | pF |
| Reverse Recovery Time | trr | $I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$ | | | 50 | ns |

■ Ordering Information

| Device | Packaging | Shipping |
|--------|-----------|------------------|
| BAV103 | LL34 | 2500/Tape & Reel |

BAV103

■ Typical Characteristics

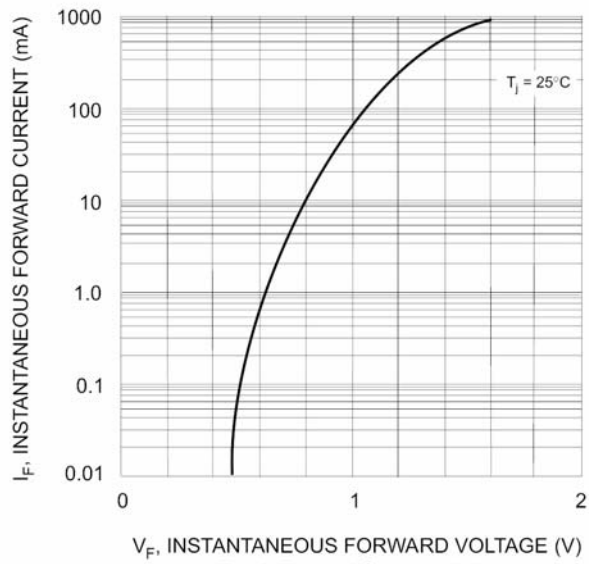


Fig. 1 Forward Characteristics

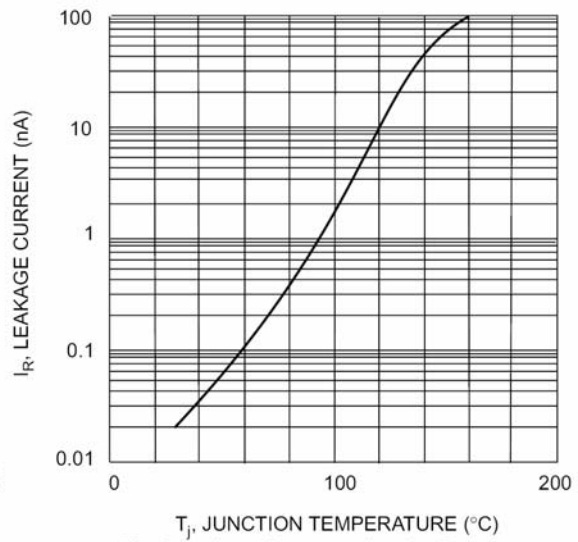


Fig. 2 Leakage Current vs Junction Temperature