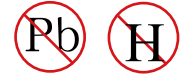


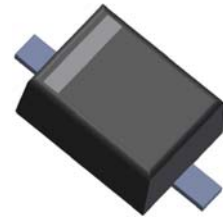


**200mW SOD-323 SURFACE MOUNT**  
**Small Outline Flat Lead Plastic Package**  
**Schottky Barrier Diode**

**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        | $^\circ\text{C}$ |
| $V_{RM}$    | Repetitive Peak Reverse Voltage                        | 40          | V                |
| $V_R$       | Maximum DC Blocking Voltage                            | 40          | V                |
| $I_{F(AV)}$ | Average Forward Rectified Current                      | 100         | mA               |
| $I_{FSM}$   | Peak Forward Surge Current<br>(8.3mS Single Half-wave) | 1           | A                |

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



SOD-323 Flat Lead

**Specification Features:**

- Low Forward Voltage Drop
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Terminal Finish
- Band Indicates Cathode

**DEVICE MARKING CODE:**

| Device Type | Device Marking |
|-------------|----------------|
| RB501V-40   | B4             |

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

| Symbol | Parameter               | Test Condition       | Limits |       | Unit          |
|--------|-------------------------|----------------------|--------|-------|---------------|
|        |                         |                      | Min    | Max   |               |
| $B_V$  | Breakdown Voltage       | $I_R=500\mu\text{A}$ | 42     |       | Volts         |
| $I_R$  | Reverse Leakage Current | $V_R=10\text{V}$     |        | 30    | $\mu\text{A}$ |
| $V_F$  | Forward Voltage         | $I_F=10\text{mA}$    |        | 0.340 | Volts         |
|        |                         | $I_F=100\text{mA}$   |        | 0.550 |               |

# DEVICE CHARACTERISTICS

## RB501V-40FL

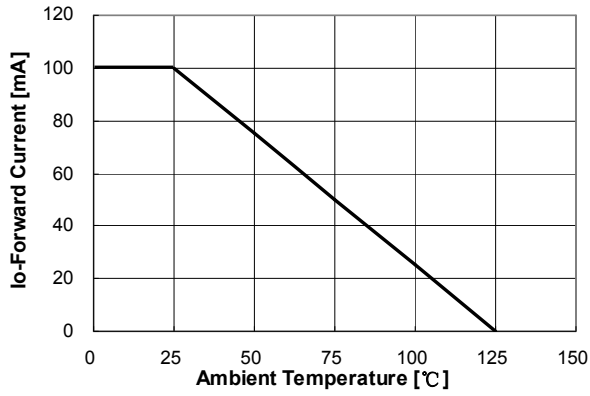


Figure 1. Forward Current Derating Curve

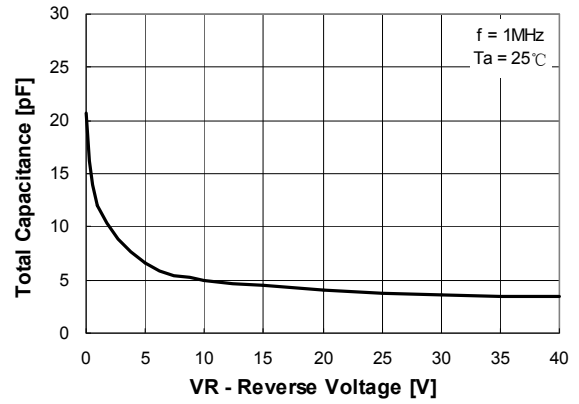


Figure 2. Total Capacitance

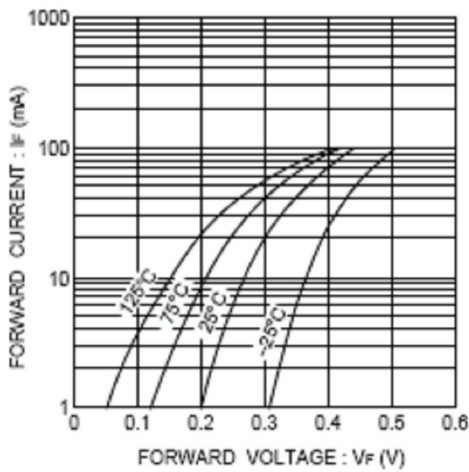


Figure 3. Forward Characteristics

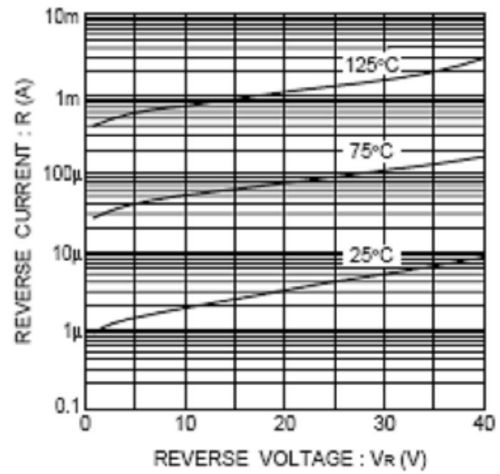
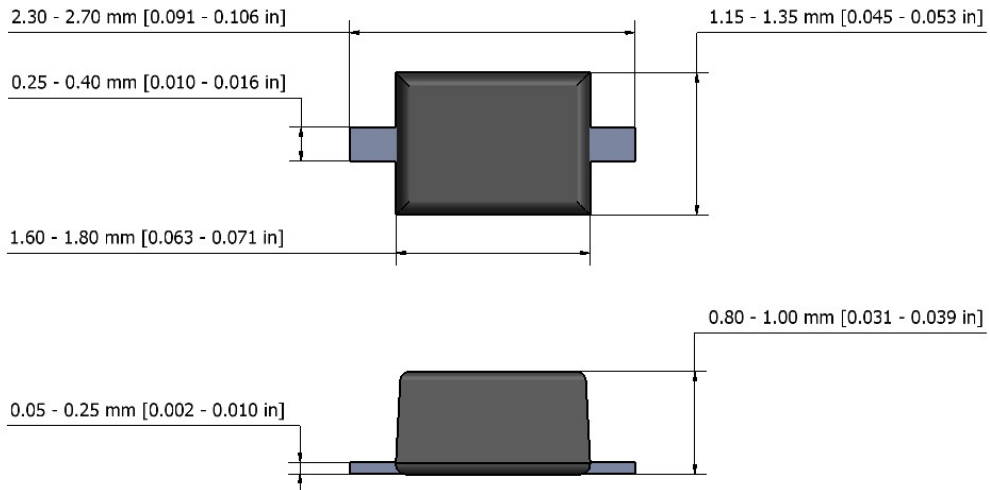


Figure 4. Reverse Characteristics

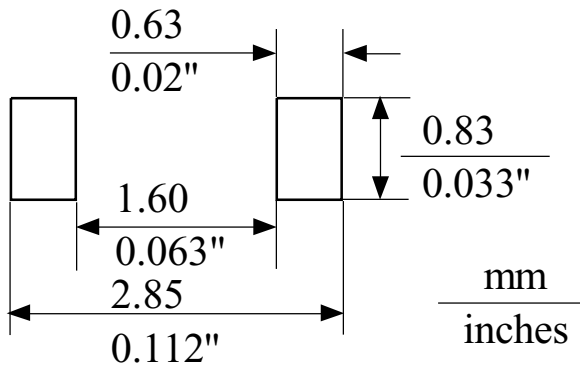
# PACKAGE OUTLINE & DIMENSIONS

## RB501V-40FL

### SOD-323 Package Outline



NOTE: The above package outline is similar to JEITA SC-90.



### MOUNTING PAD