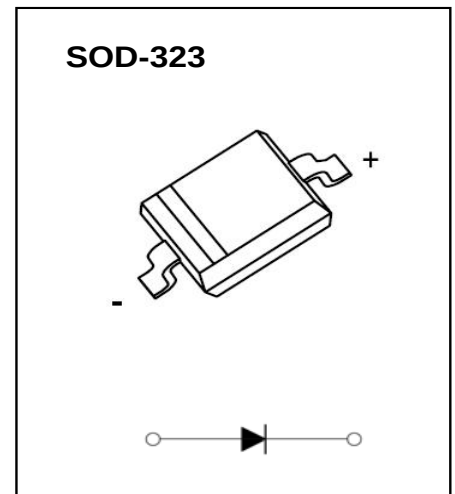
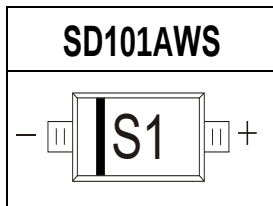


**SOD-323 Plastic-Encapsulate Diodes****SD101AWS**

SCHOTTKY BARRIER DIODE

**FEATURES**

- Low Forward Voltage Drop
- Very Low Reverse Capacitance
- Negligible Reverse Recovery Time

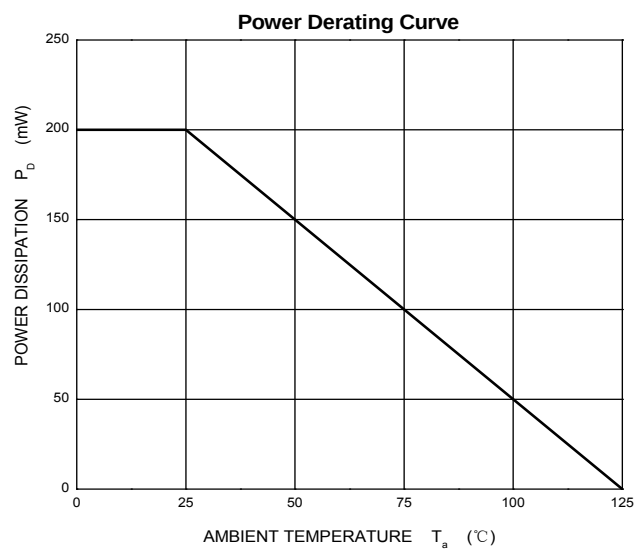
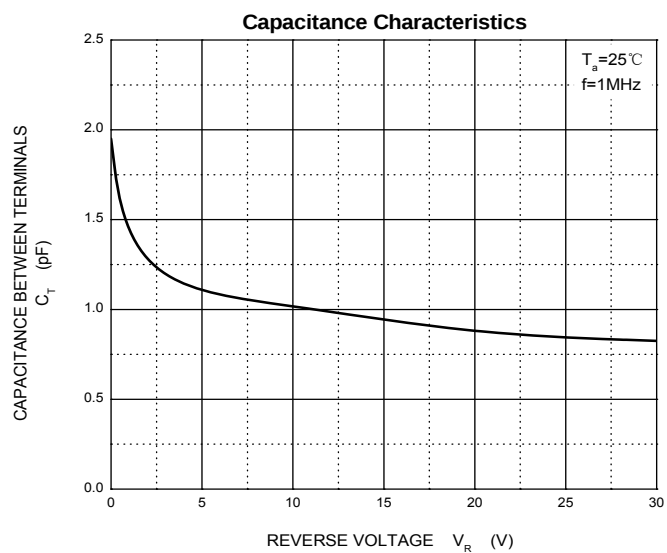
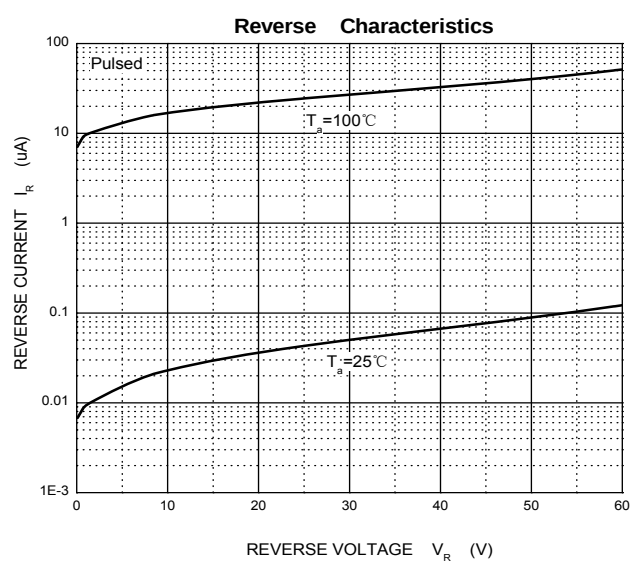
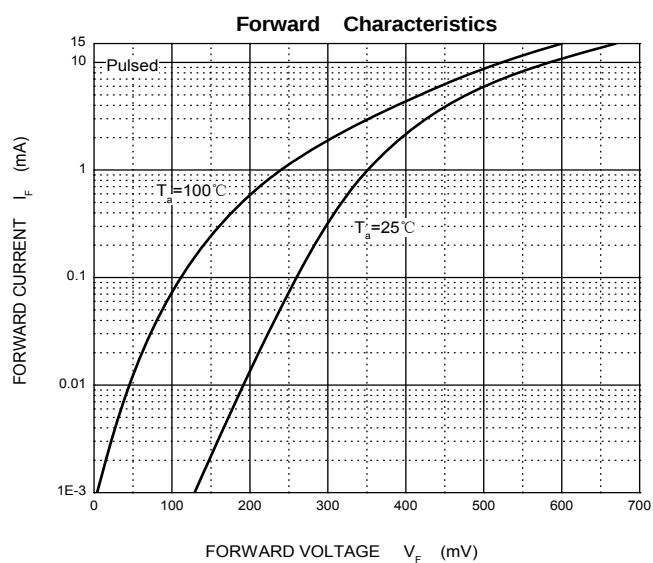
**MARKING****MAXIMUM RATINGS** ( $T_a=25^{\circ}\text{C}$  unless otherwise noted)

| Symbol          | Parameter                                                    | Value      | Unit                 |
|-----------------|--------------------------------------------------------------|------------|----------------------|
| $V_{RRM}$       | Repetitive Peak Reverse Voltage                              | 60         | V                    |
| $V_{RWM}$       | Working Peak Reverse Voltage                                 |            |                      |
| $V_R$           | DC Blocking Voltage                                          |            |                      |
| $V_{R(RMS)}$    | RMS reverse voltage                                          | 42         | V                    |
| $I_{FM}$        | Forward Continuous Current                                   | 15         | mA                   |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | 2          | A                    |
| $P_D$           | Power Dissipation                                            | 200        | mW                   |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient                  | 500        | $^{\circ}\text{C/W}$ |
| $T_j$           | Operating Junction Temperature Range                         | -40 ~ +125 | $^{\circ}\text{C}$   |
| $T_{stg}$       | Storage Temperature Range                                    | -50 ~ +150 | $^{\circ}\text{C}$   |

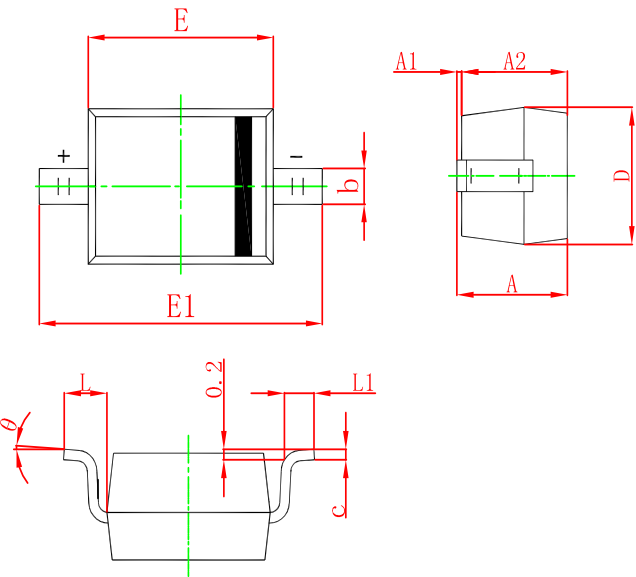
**ELECTRICAL CHARACTERISTICS** ( $T_a=25^{\circ}\text{C}$  unless otherwise specified)

| Parameter             | Symbol     | Test conditions                                           | Min | Typ | Max  | Unit          |
|-----------------------|------------|-----------------------------------------------------------|-----|-----|------|---------------|
| Reverse voltage       | $V_{(BR)}$ | $I_R=10\mu\text{A}$                                       | 60  |     |      | V             |
| Reverse current       | $I_R$      | $V_R=50\text{V}$                                          |     |     | 0.2  | $\mu\text{A}$ |
| Forward voltage       | $V_F$      | $I_F=1\text{mA}$                                          |     |     | 0.41 | V             |
|                       |            | $I_F=15\text{mA}$                                         |     |     | 1    |               |
| Total capacitance     | $C_{tot}$  | $V_R=0\text{V}, f=1\text{MHz}$                            |     |     | 2    | pF            |
| Reverse recovery time | $t_{rr}$   | $I_F=I_R=5\text{mA}, I_{rr}=0.1\times I_R, R_L=100\Omega$ |     |     | 1    | ns            |

## Typical Characteristics

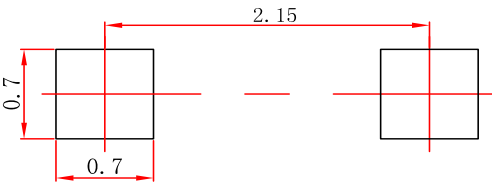


Package Outline Dimensions (SOD-323)



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      |                           | 1.100 |                      | 0.043 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.800                     | 1.000 | 0.031                | 0.039 |
| b      | 0.250                     | 0.350 | 0.010                | 0.014 |
| c      | 0.080                     | 0.150 | 0.003                | 0.006 |
| D      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E      | 1.600                     | 1.800 | 0.063                | 0.071 |
| E1     | 2.500                     | 2.750 | 0.098                | 0.108 |
| L      | 0.475 REF                 |       | 0.019 REF            |       |
| L1     | 0.250                     | 0.400 | 0.010                | 0.016 |
| θ      | 0°                        | 8°    | 0°                   | 8°    |

Suggested Pad Layout (SOD-323)



- Note:
- 1. Controlling dimension: in millimeters.
  - 2. General tolerance:  $\pm 0.05\text{mm}$ .
  - 3. The pad layout is for reference purposes only.