

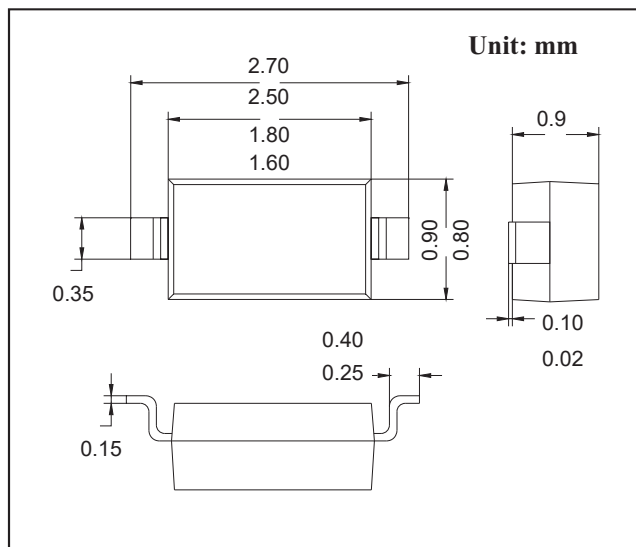
## SOD-323 Small Signal Switching Diodes

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

### MECHANICAL DATA

- Case style: SOD-323 molded plastic
- Mounting position: Any



### MAXIMUM RATINGS AND CHARACTERISTICS

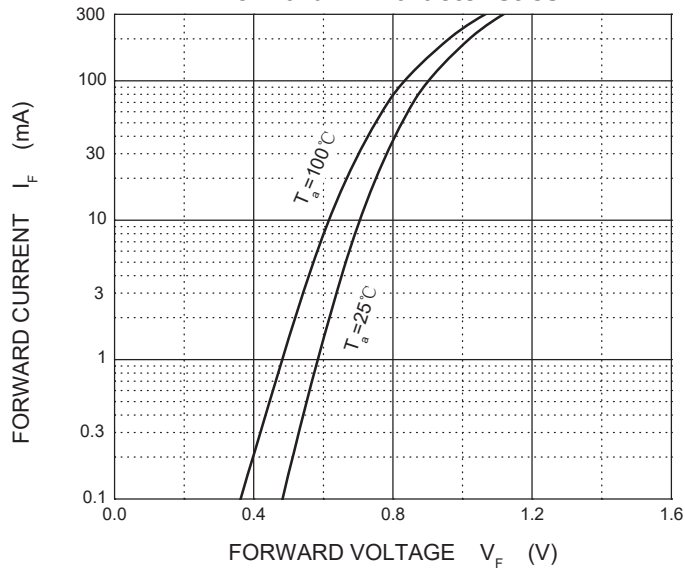
@ 25°C Ambient Temperature (unless otherwise noted)

| Parameter                                          | Symbol          | Limit    | Unit |
|----------------------------------------------------|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage                | $V_{RM}$        | 100      | V    |
| Peak Repetitive Peak Reverse Voltage               | $V_{RRM}$       | 75       | V    |
| Working Peak Reverse Voltage                       | $V_{RWM}$       |          |      |
| DC Blocking Voltage                                | $V_R$           |          |      |
| RMS Reverse Voltage                                | $V_{R(RMS)}$    | 53       | V    |
| Forward Continuous Current                         | $I_{FM}$        | 500      | mA   |
| Average Rectified Output Current                   | $I_O$           | 250      | mA   |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | $I_{FSM}$       | 2.0      | A    |
| Power Dissipation                                  | $P_d$           | 200      | mW   |
| Thermal Resistance Junction to Ambient             | $R_{\theta JA}$ | 625      | °C/W |
| Junction Temperature                               | $T_j$           | 150      | °C   |
| Storage Temperature                                | $T_{STG}$       | -55~+150 | °C   |

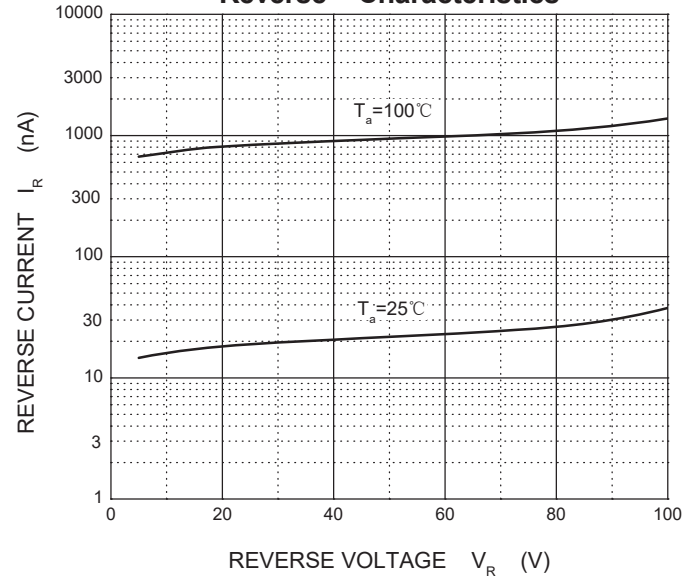
| Parameter                     | Symbol      | Min  | Typ | Max   | Unit    | Conditions                                       |
|-------------------------------|-------------|------|-----|-------|---------|--------------------------------------------------|
| Reverse Breakdown Voltage     | $V_{(BR)R}$ | 75   |     |       | V       | $I_R=10\mu A$                                    |
| Forward Voltage               | $V_{F1}$    | 0.62 |     | 0.72  | V       | $I_F=5mA$                                        |
|                               | $V_{F2}$    |      |     | 0.855 | V       | $I_F=10mA$                                       |
|                               | $V_{F3}$    |      |     | 1.0   | V       | $I_F=100mA$                                      |
|                               | $V_{F4}$    |      |     | 1.25  | V       | $I_F=150mA$                                      |
| Reverse Current               | $I_{R1}$    |      |     | 2.5   | $\mu A$ | $V_R=75V$                                        |
|                               | $I_{R2}$    |      |     | 25    | nA      | $V_R=20V$                                        |
| Capacitance Between Terminals | $C_T$       |      |     | 4     | pF      | $V_R=0V, f=1MHz$                                 |
| Reverse Recovery Time         | $t_{rr}$    |      |     | 4     | ns      | $I_F=I_R=10mA$<br>$I_{rr}=0.1I_R, R_L=100\Omega$ |

# RATINGS AND CHARACTERISTIC CURVES

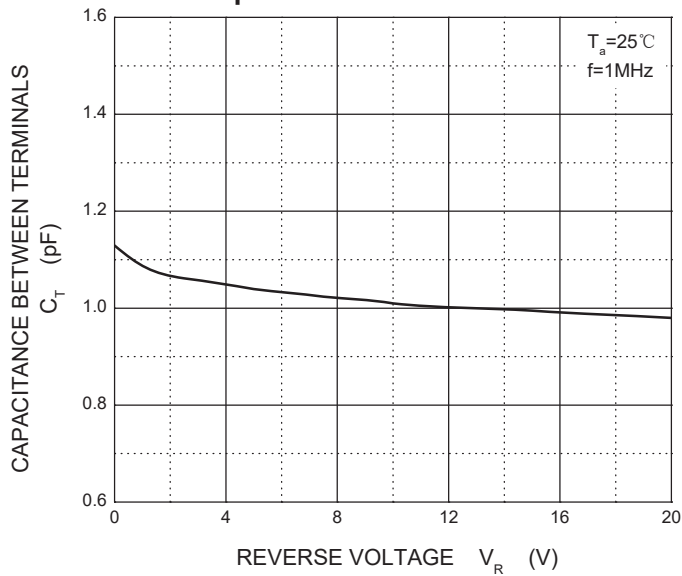
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

