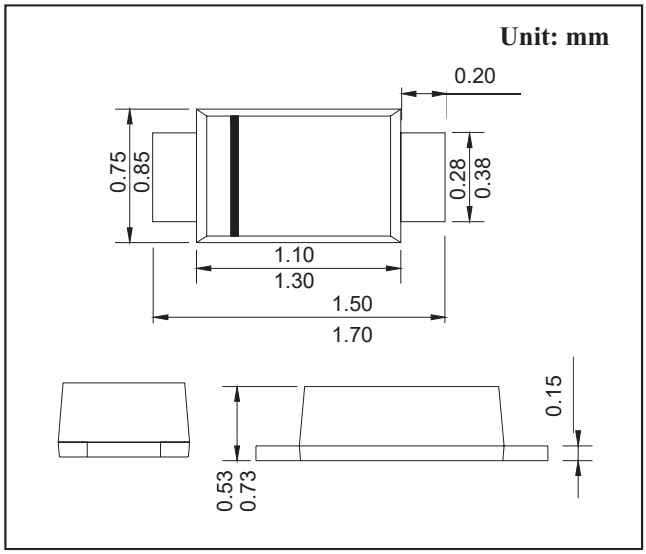
# SOD-523 Small Signal Switching Diodes

## 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 ℃/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

## MECHANICAL DATA

- Case style: SOD-523 molded plastic
- Mounting position: Any




## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|---|---|---|---|
| $V_{RM}$ | Non-Repetitive Peak Reverse Voltage | 100 | V |
| $V_R$ | Reverse Voltage | 75 | V |
| $V_{RRM}$ | Peak Repetitive Reverse Voltage | | |
| $V_{RWM}$ | Working Peak Reverse Voltage | | |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 53 | V |
| $I_O$ | Average Rectified Output Current | 150 | mA |
| $I_{FM}$ | Forward Continuous Current | 300 | mA |
| $I_{FSM}$ | Non-repetitive Peak Forward Surge Current@t=8.3ms | 2 | A |
| $P_D$ | Power Dissipation | 150 | mW |
| $R_{\Theta JA}$ | Thermal Resistance from Junction to Ambient | 833 | ℃/W |
| $T_j$ | Junction Temperature | 150 | ℃ |
| $T_{stg}$ | Storage Temperature | -55~+150 | ℃ |

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| **Reverse voltage** | $V_{(BR)}$ | $I_R$=1μA | 75 | | | V |
| **Reverse current** | $I_R$ | $V_R$=75V | | | 1 | μA |
| | | $V_R$=20V | | | 25 | nA |
| **Forward voltage** | $V_F$ | $I_F$=1mA | | | 0.715 | V |
| | | $I_F$=10mA | | | 0.855 | V |
| | | $I_F$=50mA | | | 1 | V |
| | | $I_F$=150mA | | | 1.25 | V |
| **Total capacitance** | $C_{tot}$ | $V_R$=0V,f=1MHz | | | 2 | pF |
| **Reverse recovery time** | $t_{rr}$ | $I_F$= $I_R$ =10mA, $I_{rr}$=0.1*$I_R$,$R_L$=100Ω | | | 4 | ns |

# RATINGS AND CHARACTERISTIC CURVES