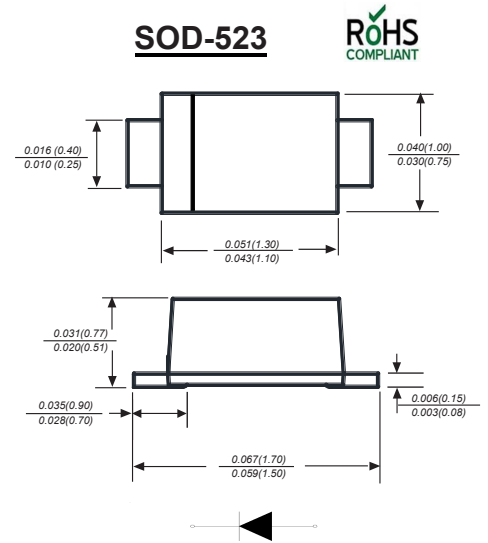


## Features

- ◆ Low Forward Voltage
- ◆ High Current Capability

## Mechanical Data

- ◆ Case : JEDEC SOD-523 molded plastic body
- ◆ Mounting Position : Any
- ◆ Marking;SD103AWT:S4



Dimensions in inches and (millimeters)

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

| Parameter                                               | Symbols         | SD103AWT   | Units                |
|---------------------------------------------------------|-----------------|------------|----------------------|
| Maximum Repetitive Peak Reverse Voltage                 | $V_{RRM}$       | 40         | V                    |
| Maximum RMS voltage                                     | $V_{RMS}$       | 28         | V                    |
| Maximum DC blocking voltage                             | $V_{DC}$        | 40         | V                    |
| Maximum average forward rectified current               | $I_{FM}$        | 350        | mA                   |
| Peak forward surge current 8.3 ms single half sine-wave | $I_{FSM}$       | 2          | A                    |
| Power Dissipation                                       | $P_{tot}$       | 150        | mW                   |
| Typical Thermal Resistance                              | $R_{\theta JA}$ | 667        | $^{\circ}\text{C/W}$ |
| Operating junction temperature                          | $T_j$           | 125        | $^{\circ}\text{C}$   |
| Storage Temperature Range                               | $T_{stg}$       | -50 ~ +150 | $^{\circ}\text{C}$   |

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

| Parameter                    | Symbols     | Test conditions                                                                 | Min | Typ          | Max          | Units         |
|------------------------------|-------------|---------------------------------------------------------------------------------|-----|--------------|--------------|---------------|
| Reverse Breakdown Voltage    | $V_{(BR)R}$ | $I_R=100\mu\text{A}$                                                            | 40  |              |              | V             |
| Maximum Forward Voltage      | $V_F$       | $I_F=1\text{mA}$<br>$I_F=5\text{mA}$<br>$I_F=20\text{mA}$<br>$I_F=200\text{mA}$ |     | 0.27<br>0.32 | 0.37<br>0.60 | V             |
| Peak Reverse Current         | $I_R$       | $V_R=30\text{V}$<br>$V_R=20\text{V}$<br>$V_R=10\text{V}$                        |     |              | 5<br>2<br>1  | $\mu\text{A}$ |
| Typical Junction Capacitance | $C_j$       | $V_R=0\text{V}, f=1\text{MHz}$                                                  |     | 50           |              | pF            |
| Reverse Recovery Time        | $t_{rr}$    | $I_F=I_R=200\text{mA}$ ,<br>$I_{rr}=0.1 \times I_R, R_L=100\Omega$              |     | 10           |              | ns            |

## Typical Characteristics

