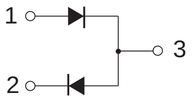
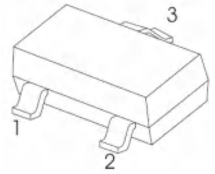
# **1SS226W** SWITCHING DIODE



## FEATURES

- Low forward voltage
- Fast reverse recovery time
- Small total capacitance

**MARKING: C3**



**SOT-323**

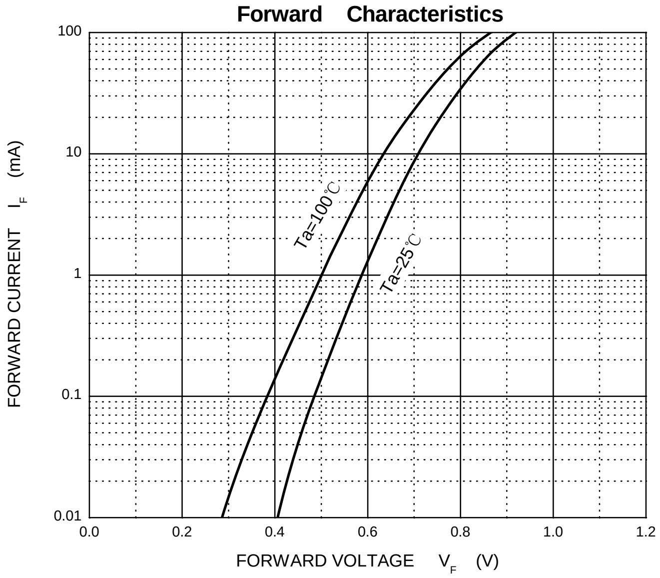
## Maximum Ratings ,Single Diode @Ta=25℃

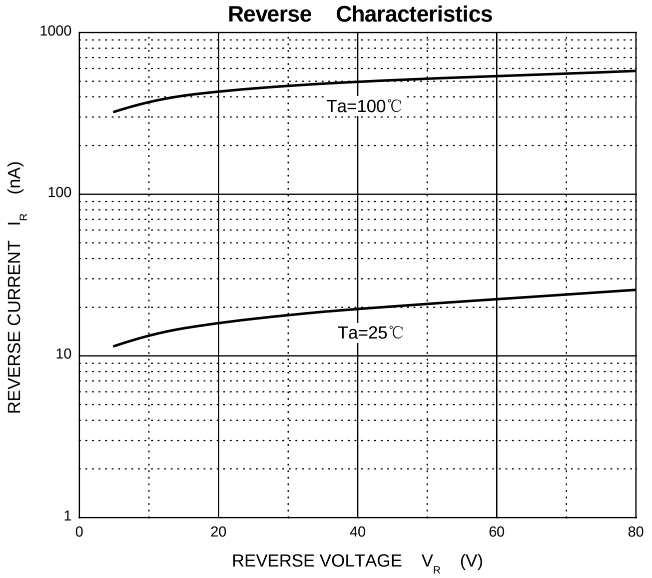
| Parameter | Symbol | Limit | Unit |
|---|---|---|---|
| **Non-Repetitive Peak Reverse Voltage** | $V_{RM}$ | 85 | V |
| **Peak Repetitive Peak Reverse Voltage**<br>**Working Peak Reverse Voltage**<br>**DC Blocking Voltage** | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 80 | V |
| **Forward Continuous Current** | $I_{FM}$ | 300 | mA |
| **Average Rectified Output Current** | $I_O$ | 100 | mA |
| **Non-Repetitive Peak Forward Surge Current @t=8.3ms** | $I_{FSM}$ | 2 | A |
| **Power Dissipation** | $P_D$ | 150 | mW |
| **Thermal Resistance from Junction to Ambient** | $R_{\theta JA}$ | 833 | ℃/W |
| **Junction Temperature** | $T_J$ | 150 | ℃ |
| **Storage Temperature** | $T_{STG}$ | -55~+150 | ℃ |

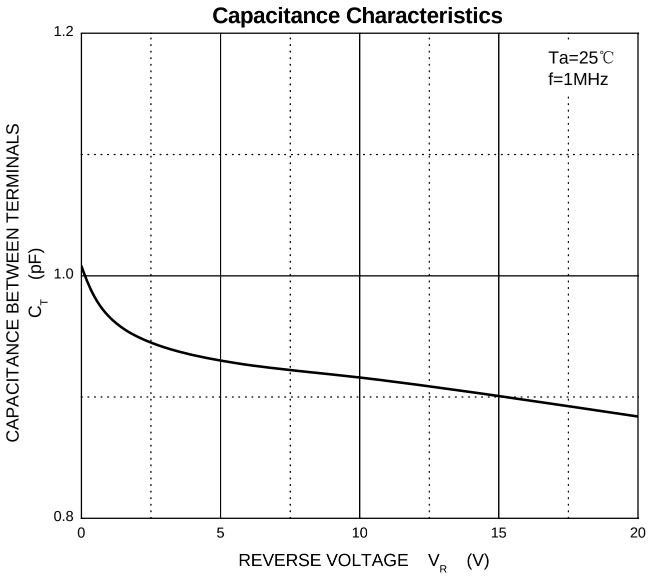
## ELECTRICAL CHARACTERISTICS (Ta=25℃ unless otherwise specified)

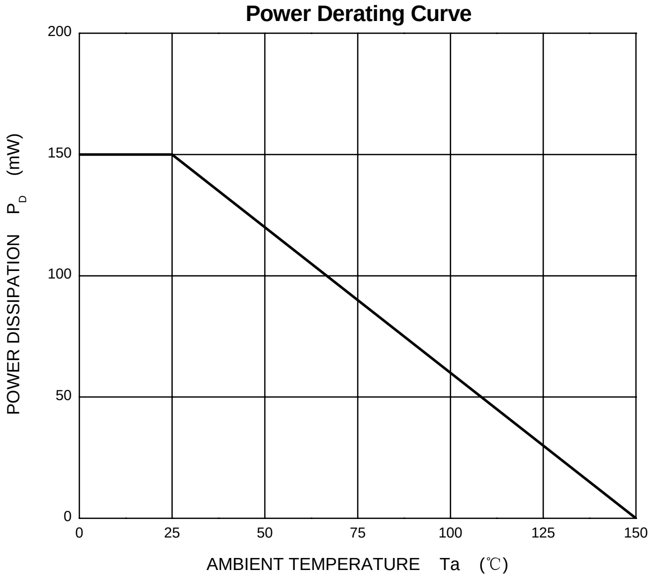
| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| **Reverse breakdown voltage** | $V_{(BR)}$ | $I_R$= 100uA | 80 | | V |
| **Reverse voltage leakage current** | $I_R$ | $V_R$=80V | | 0.5 | uA |
| **Forward voltage** | $V_F$ | $I_F$=100mA | | 1.2 | V |
| **Diode capacitance** | $C_D$ | $V_R$=0V, f=1MHz | | 3 | pF |
| **Reverse recovery time** | $t_{rr}$ | $I_F$=10mA | | 4 | ns |

## Typical Characteristics

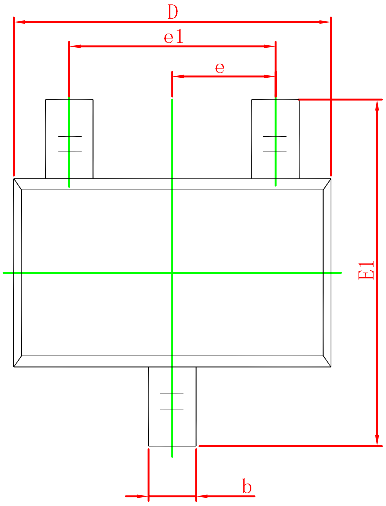

Forward Characteristics

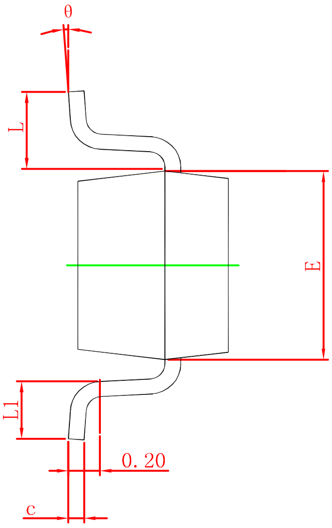

Reverse Characteristics

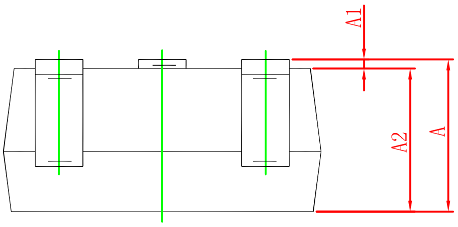

Capacitance Characteristics


Power Derating Curve

## PACKAGE OUTLINE DIMENSIONS







| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | **Min.** | **Max.** | **Min.** | **Max.** |
| A | 0.900 | 1.100 | 0.035 | 0.043 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.000 | 0.035 | 0.039 |
| b | 0.200 | 0.400 | 0.008 | 0.016 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.000 | 2.200 | 0.079 | 0.087 |
| E | 1.150 | 1.350 | 0.045 | 0.053 |
| E1 | 2.150 | 2.450 | 0.085 | 0.096 |
| e | 0.650 TYP. | | 0.026 TYP. | |
| e1 | 1.200 | 1.400 | 0.047 | 0.055 |
| L | 0.525 REF. | | 0.021 REF. | |
| L1 | 0.260 | 0.460 | 0.010 | 0.018 |
| θ | 0° | 8° | 0° | 8° |