

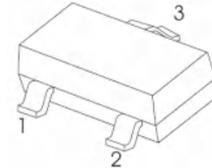
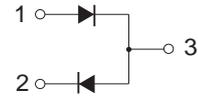


1SS226WT SWITCHING DIODE

FEATURES

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

MARKING: C3



SOT-523

Maximum Ratings ,Single Diode @Ta=25°C

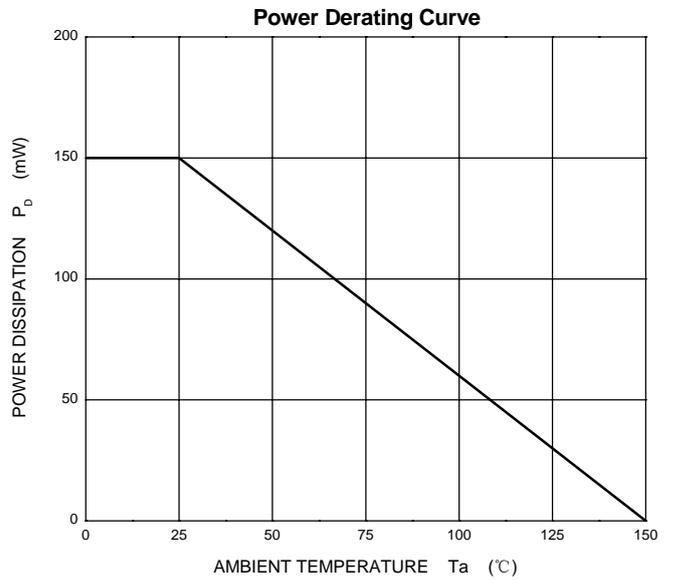
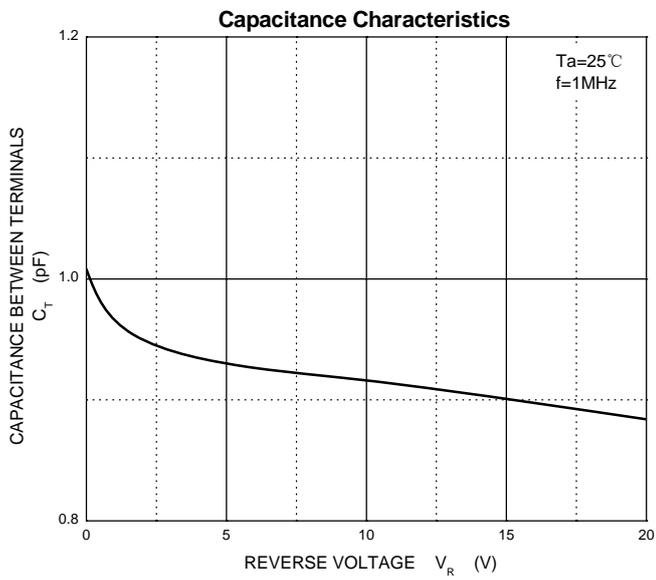
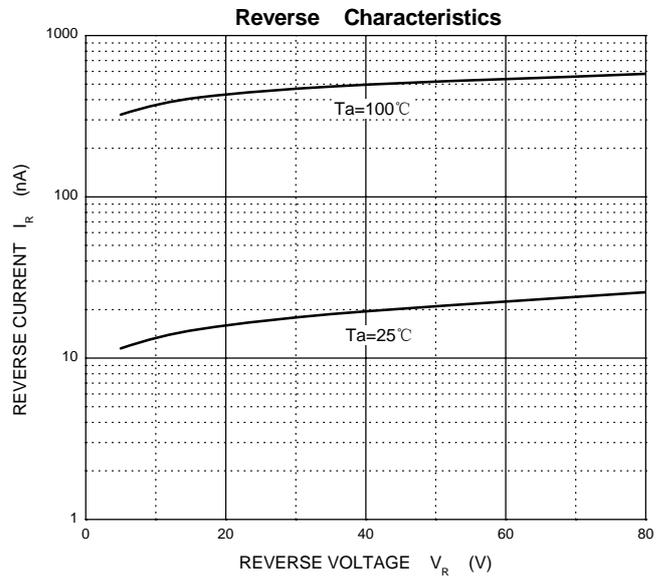
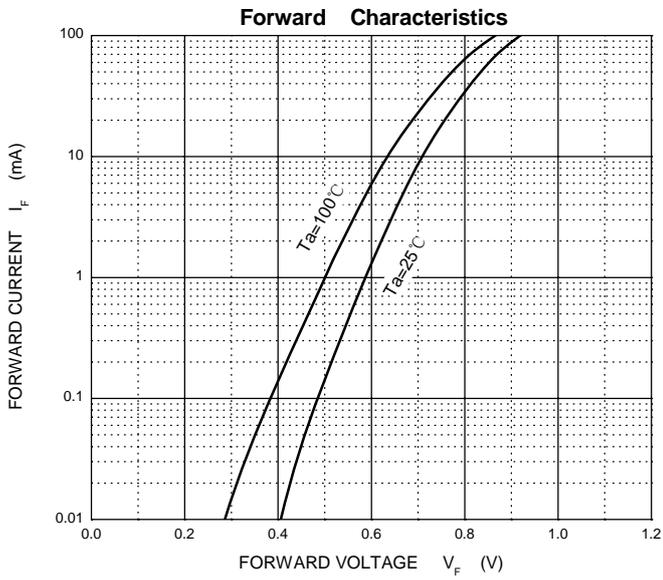
| Parameter | Symbol | Limit | Unit |
|--|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 85 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 80 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | 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 | °C/W |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{STG} | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---------------------------------|------------|------------------|-----|-----|---------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 80 | | V |
| Reverse voltage leakage current | I_R | $V_R=80V$ | | 0.5 | μA |
| 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 |

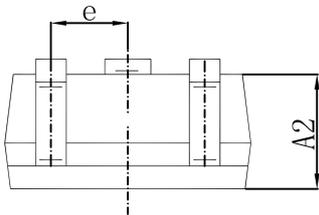
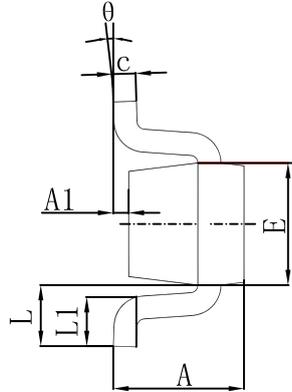
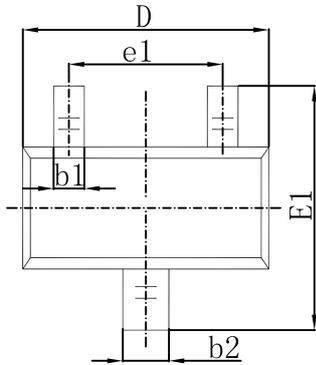


Typical Characteristics



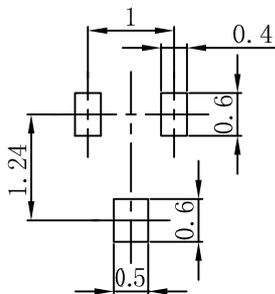


SOT-523 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.700 | 0.900 | 0.028 | 0.035 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.700 | 0.800 | 0.028 | 0.031 |
| b1 | 0.150 | 0.250 | 0.006 | 0.010 |
| b2 | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.100 | 0.200 | 0.004 | 0.008 |
| D | 1.500 | 1.700 | 0.059 | 0.067 |
| E | 0.700 | 0.900 | 0.028 | 0.035 |
| E1 | 1.450 | 1.750 | 0.057 | 0.069 |
| e | 0.500 TYP. | | 0.020 TYP. | |
| e1 | 0.900 | 1.100 | 0.035 | 0.043 |
| L | 0.400 REF. | | 0.016 REF. | |
| L1 | 0.260 | 0.460 | 0.010 | 0.018 |
| θ | 0° | 8° | 0° | 8° |

SOT-523 Suggested Pad Layout



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