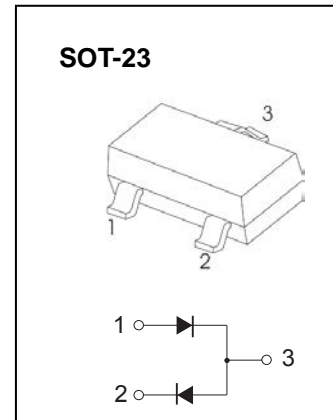
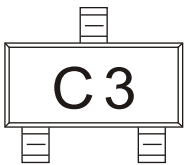


SOT-23 Plastic-Encapsulate Diodes

FEATURES

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

MARKING: C3



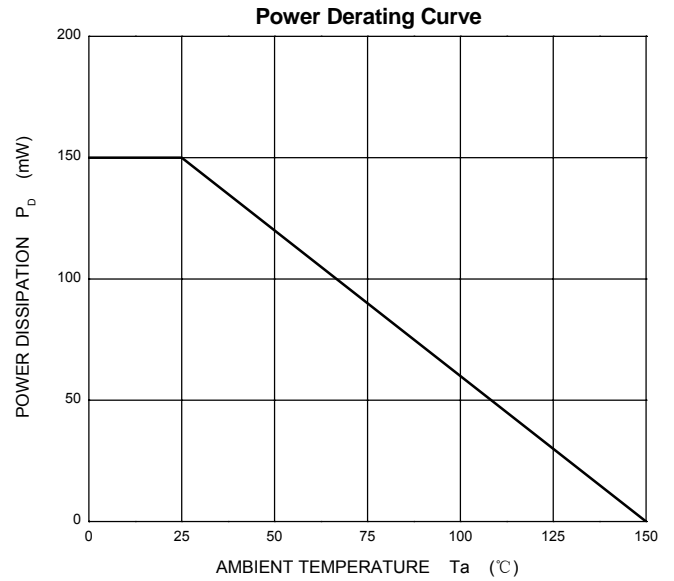
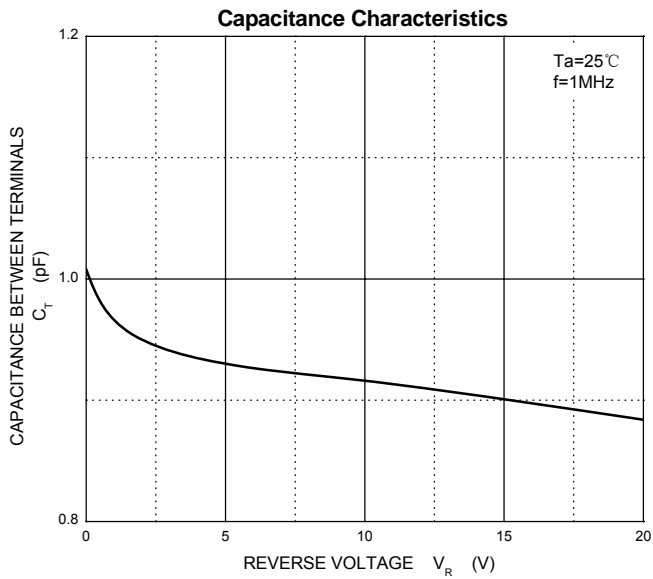
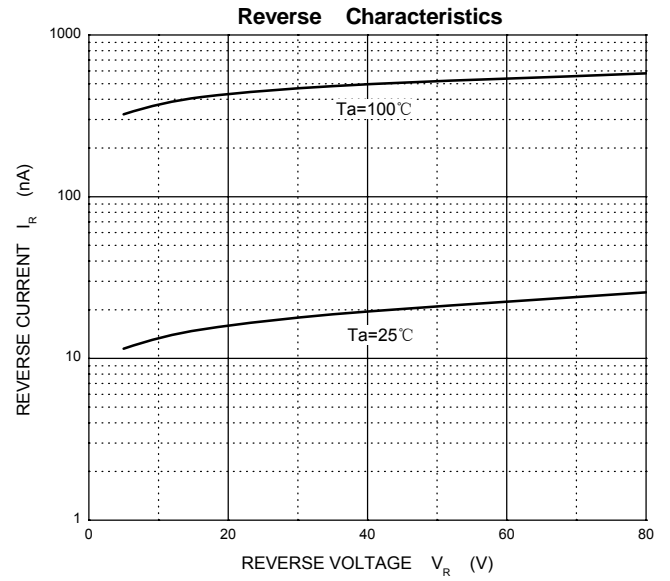
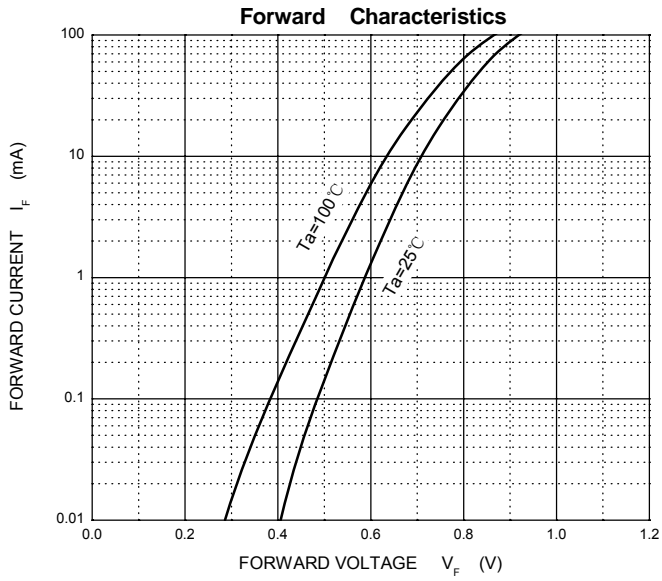
Maximum Ratings ,Single Diode @Ta=25°C

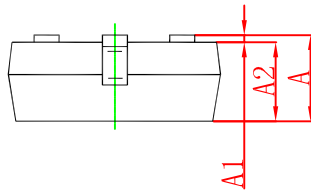
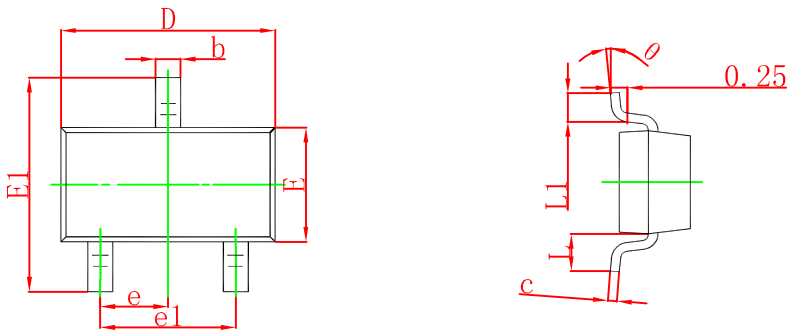
| Parameter | Symbol | Limit | Unit |
|--|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 85 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 80 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | 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 |
| Operation Junction and Storage Temperature Range | T_J, 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 |

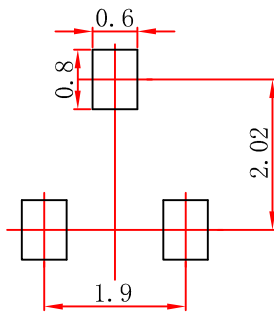
Typical Characteristics





| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950 TYP | | 0.037 TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550 REF | | 0.022 REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |

SOT-23 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.