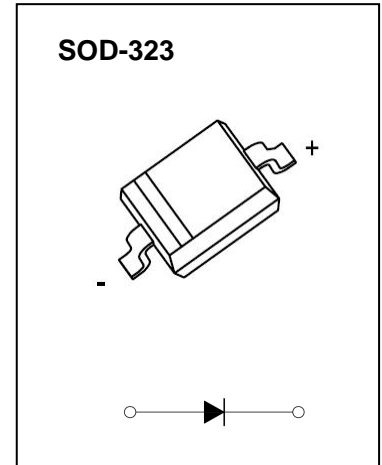


SOD-323 Plastic-Encapsulate Diodes

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

MARKING: T6



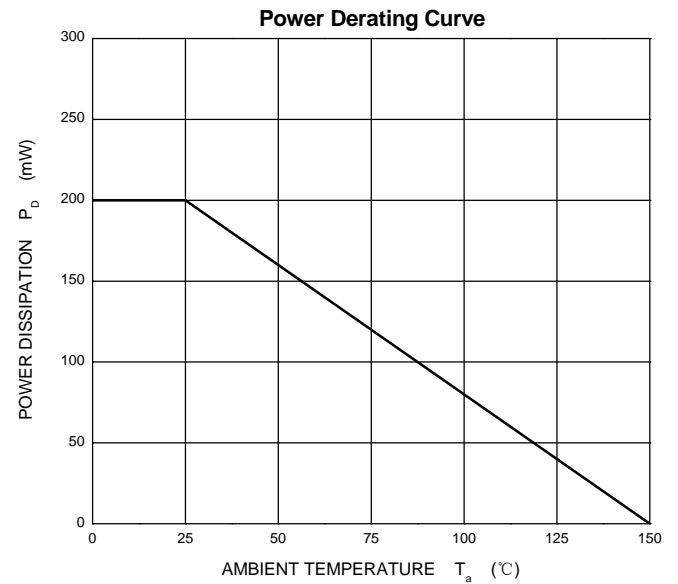
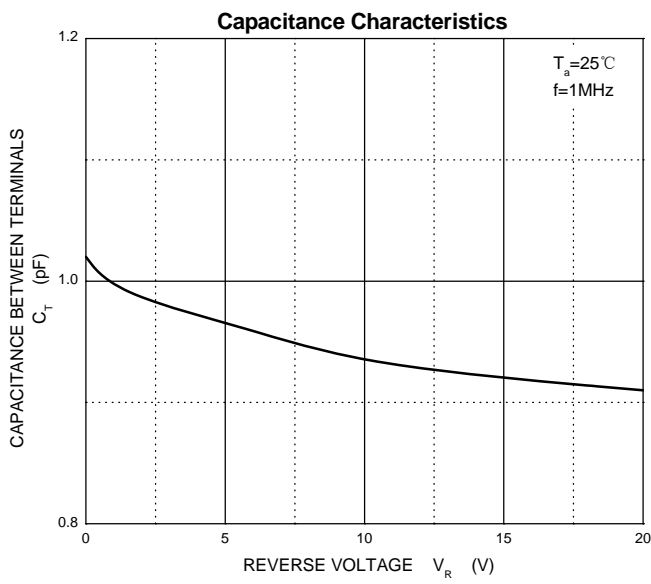
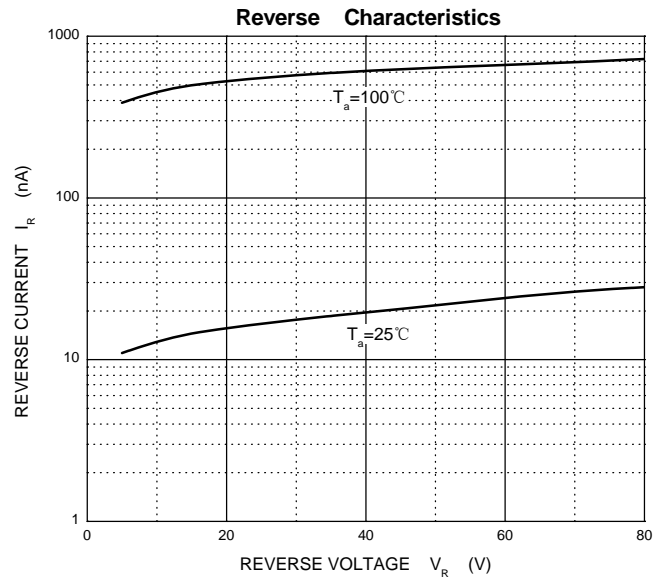
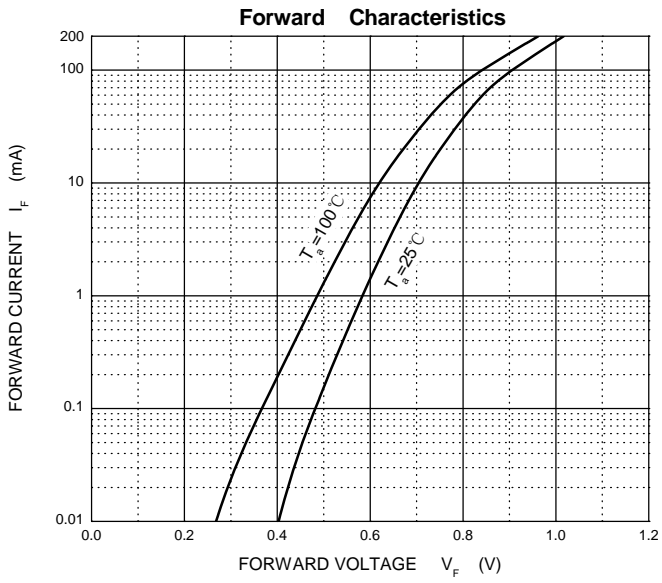
Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25°C

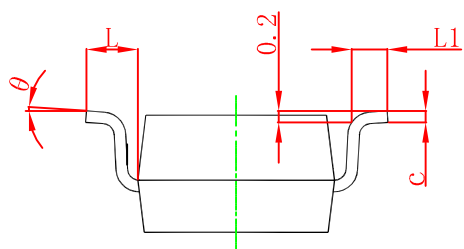
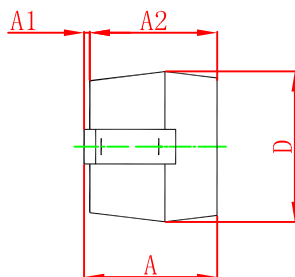
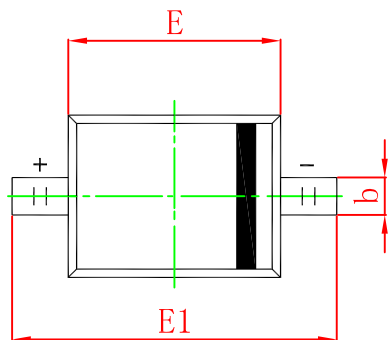
| Parameter | Symbol | Limit | Unit |
|--|---------------------|----------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V _{RRM} | 100 | V |
| Working Peak Reverse Voltage | V _{RWM} | | |
| DC Blocking Voltage | V _R | | |
| RMS Reverse Voltage | V _{R(RMS)} | 71 | V |
| Forward Continuous Current | I _{FM} | 300 | mA |
| Average Rectified Output Current | I _O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I _{FSM} | 2.0 | A |
| Power Dissipation | P _d | 200 | mW |
| Thermal Resistance from Junction to Ambient | R _{θJA} | 625 | °C/W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature | T _{STG} | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS
Electrical Ratings @Ta=25°C

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|--------------------------------------|----------|-----|-----|-------|---------------|---|
| Forward voltage | V_{F1} | | | 0.715 | V | $I_F=1\text{mA}$ |
| | V_{F2} | | | 0.855 | V | $I_F=10\text{mA}$ |
| | V_{F3} | | | 1.0 | V | $I_F=50\text{mA}$ |
| | V_{F4} | | | 1.25 | V | $I_F=150\text{mA}$ |
| Reverse current | I_{R1} | | | 1 | μA | $V_R=75\text{V}$ |
| | I_{R2} | | | 25 | nA | $V_R=20\text{V}$ |
| Capacitance between terminals | C_T | | | 2 | pF | $V_R=0\text{V}, f=1\text{MHz}$ |
| Reverse recovery time | t_{rr} | | | 4 | ns | $I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$ |

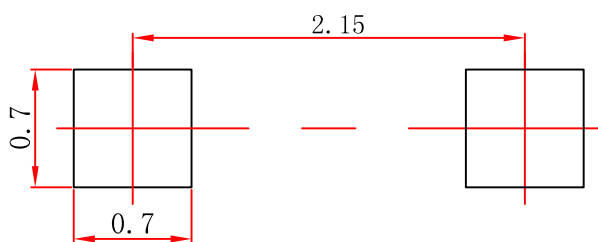
Typical Characteristics





| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | | 1.000 | | 0.039 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.800 | 0.900 | 0.031 | 0.035 |
| b | 0.250 | 0.350 | 0.010 | 0.014 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.200 | 1.400 | 0.047 | 0.055 |
| E | 1.600 | 1.800 | 0.063 | 0.071 |
| E1 | 2.550 | 2.750 | 0.100 | 0.108 |
| L | 0.475 REF. | | 0.019 REF. | |
| L1 | 0.250 | 0.400 | 0.010 | 0.016 |
| θ | 0° | 8° | 0° | 8° |

SOD-323 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.