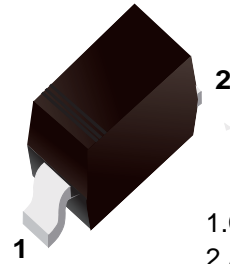
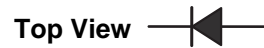


■ **General Purpose Rectifier Applications**



1.Cathode
2.Anode

■ **Simplified outline(SOD-323)**



■ **Features**

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

■ **Absolute Maximum Ratings Ta = 25°C**

| Parameter | Symbol | Rating | Unit |
|--|---------------------|------------|------|
| Reverse Voltage | V _{RM} | 120 | V |
| Peak Repetitive Peak Reverse Voltage | V _{RRM} | 120 | |
| Working Peak Reverse Voltage | V _{RWM} | | |
| DC Blocking Voltage | V _R | | |
| RMS Reverse Voltage | V _{R(RMS)} | 71 | mA |
| Average Rectified Output Current | I _o | 150 | |
| Forward Continuous Current | I _{FM} | 300 | A |
| Peak Forward Surge Current @ t=1us | I _{FSM} | 2 | |
| @ t=1s | | 1 | |
| Power Dissipation | P _d | 500 | mW |
| Thermal Resistance Junction to Ambient | R _{θJA} | 250 | °C/W |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature range | T _{stg} | -55 to 150 | |

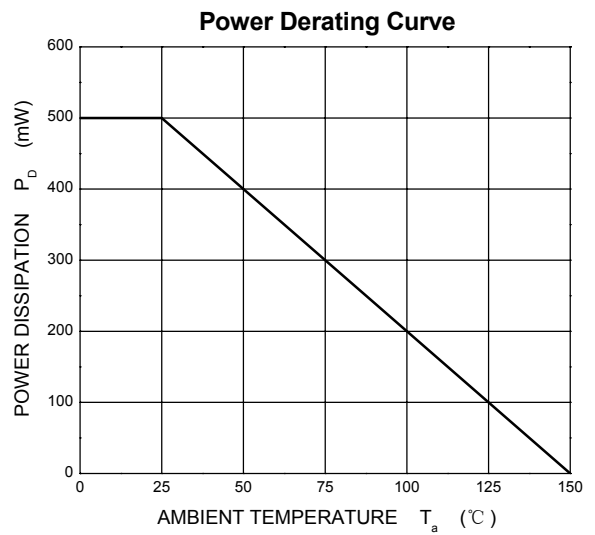
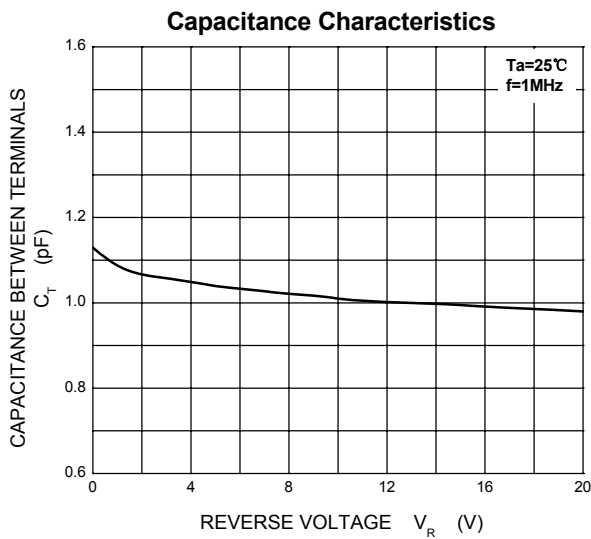
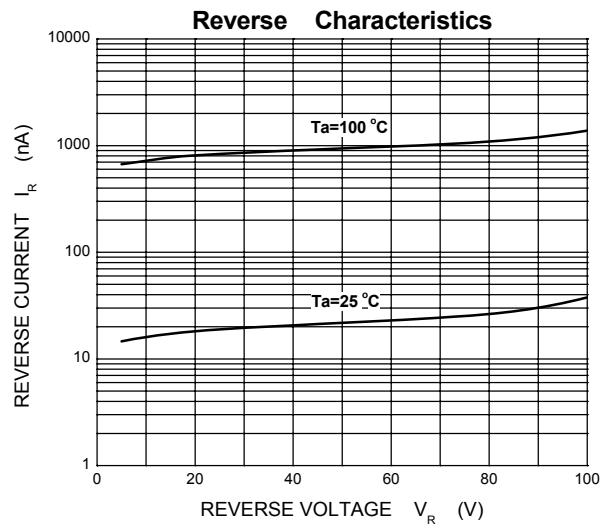
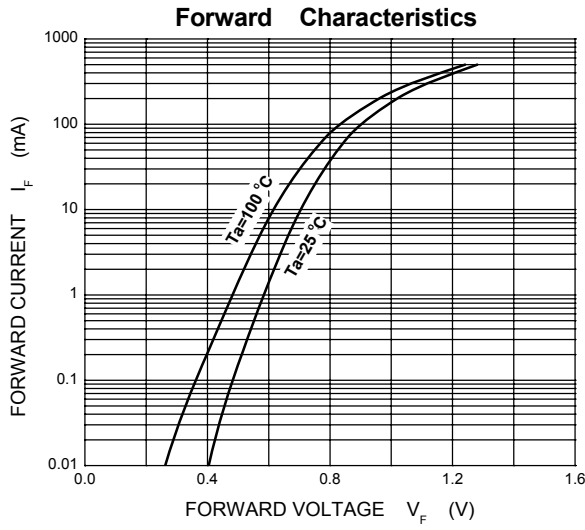
■ **Electrical Characteristics Ta = 25°C**

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---------------------------------|-----------------|--|-----|-----|-------|------|
| Reverse breakdown voltage | V _R | I _R = 100uA | 100 | | | V |
| Forward voltage | V _{F1} | I _F = 1mA | | | 0.715 | |
| | V _{F2} | I _F = 10 mA | | | 0.855 | |
| | V _{F3} | I _F = 50 mA | | | 1 | |
| | V _{F4} | I _F = 150 mA | | | 1.25 | |
| Reverse voltage leakage current | I _{R1} | V _R = 75 V | | | 1 | uA |
| | I _{R2} | V _R =20 V | | | 25 | nA |
| Junction capacitance | C _j | V _R = 0 V, f= 1 MHz | | | 2 | pF |
| Reverse recovery time | t _{rr} | I _F =I _R =10mA, I _{rr} =0.1xI _R , R _L =100Ω | | | 4 | ns |

■ **Marking**

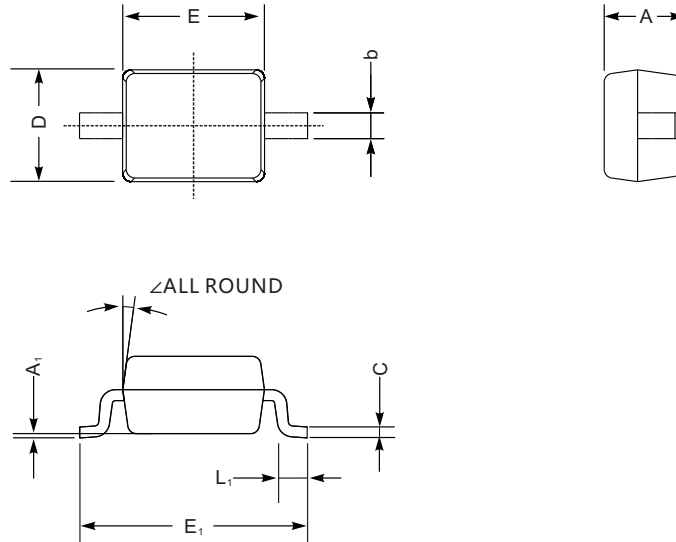
| | |
|---------|----|
| Marking | T1 |
|---------|----|

■ Typical Characteristics



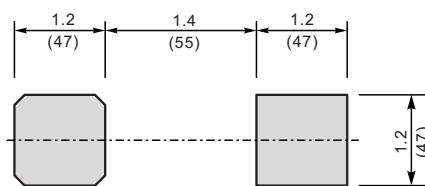
Package Outline SOD-323

Plastic surface mounted package; 2 leads



| UNIT | | A | C | D | E | E ₁ | b | L ₁ | A ₁ | ∠ |
|------|-----|-----|------|-----|-----|----------------|------|----------------|----------------|----|
| mm | max | 1.1 | 0.15 | 1.4 | 1.8 | 2.75 | 0.4 | 0.45 | 0.2 | 9° |
| | min | 0.8 | 0.08 | 1.2 | 1.4 | 2.55 | 0.25 | 0.2 | — | |
| mil | max | 43 | 5.9 | 55 | 70 | 108 | 16 | 16 | 8 | |
| | min | 32 | 3.1 | 47 | 63 | 100 | 9.8 | 7.9 | — | |

The recommended mounting pad size



Unit: $\frac{\text{mm}}{\text{(mil)}}$

Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| SOD-323 | Tape/Reel, 7" reel | 3000 | EIA-481-1 |