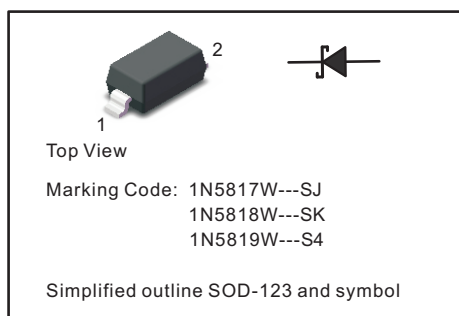


1N5817W THRU 1N5819W

SCHOTTKY BARRIER RECTIFIERS

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



FEATURES

- ◆ Metal silicon junction, majority carrier conduction
- ◆ Guarding for overvoltage protection
- ◆ Low power loss, high efficiency
- ◆ High current capability
- ◆ low forward voltage drop
- ◆ High surge capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- ◆ Case: SOD-123
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 16mg/0.00056oz

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter | Symbols | 1N5817W | 1N5818W | 1N5819W | Units |
|--|----------------|--------------|---------------|------------|-------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | V |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 1 | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method) | I_{FSM} | 25 | | | A |
| Maximum Instantaneous Forward Voltage at 1 A at 3 A | V_F | 0.45 0.75 | 0.55 0.875 | 0.6 0.9 | V |
| Maximum Instantaneous Reverse Current at $T_A = 25^{\circ}C$ Rated DC Reverse Voltage $T_A = 100^{\circ}C$ | I_R | 1 10 | | | mA |
| Typical Junction Capacitance | C_j | 110 | | | pF |
| Storage and Operating Junction Temperature Range | T_j, T_{stg} | -55 ~ +150 | | | $^{\circ}C$ |



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Fig.1 Forward Current Derating Curve

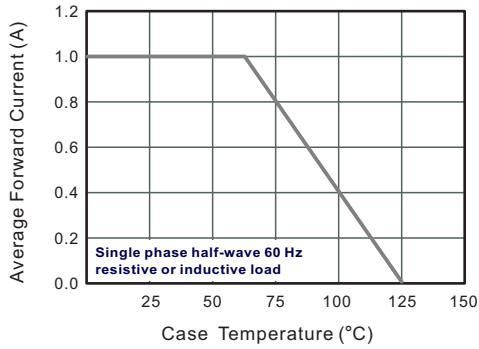


Fig.2 Typical Reverse Characteristics

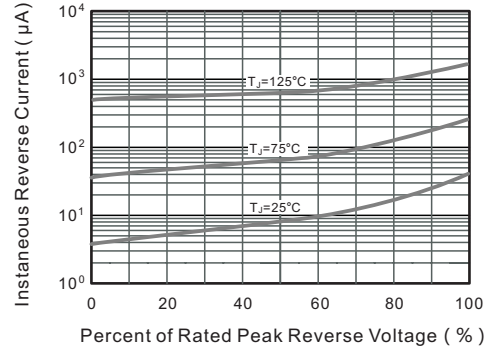


Fig.3 Typical Forward Characteristic

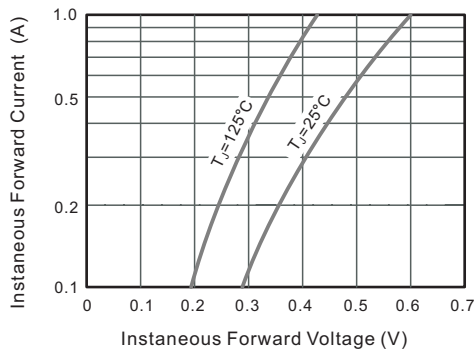


Fig.4 Typical Junction Capacitance

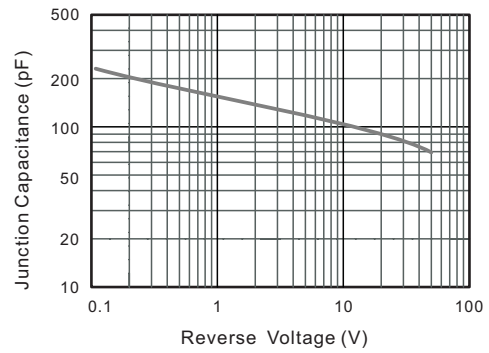
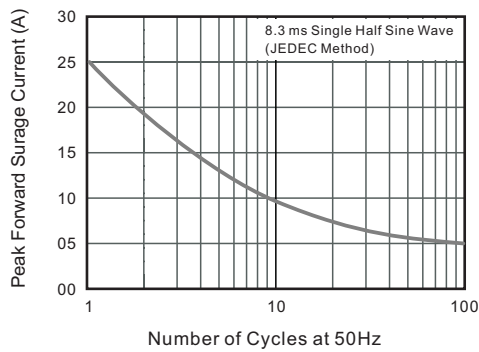


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

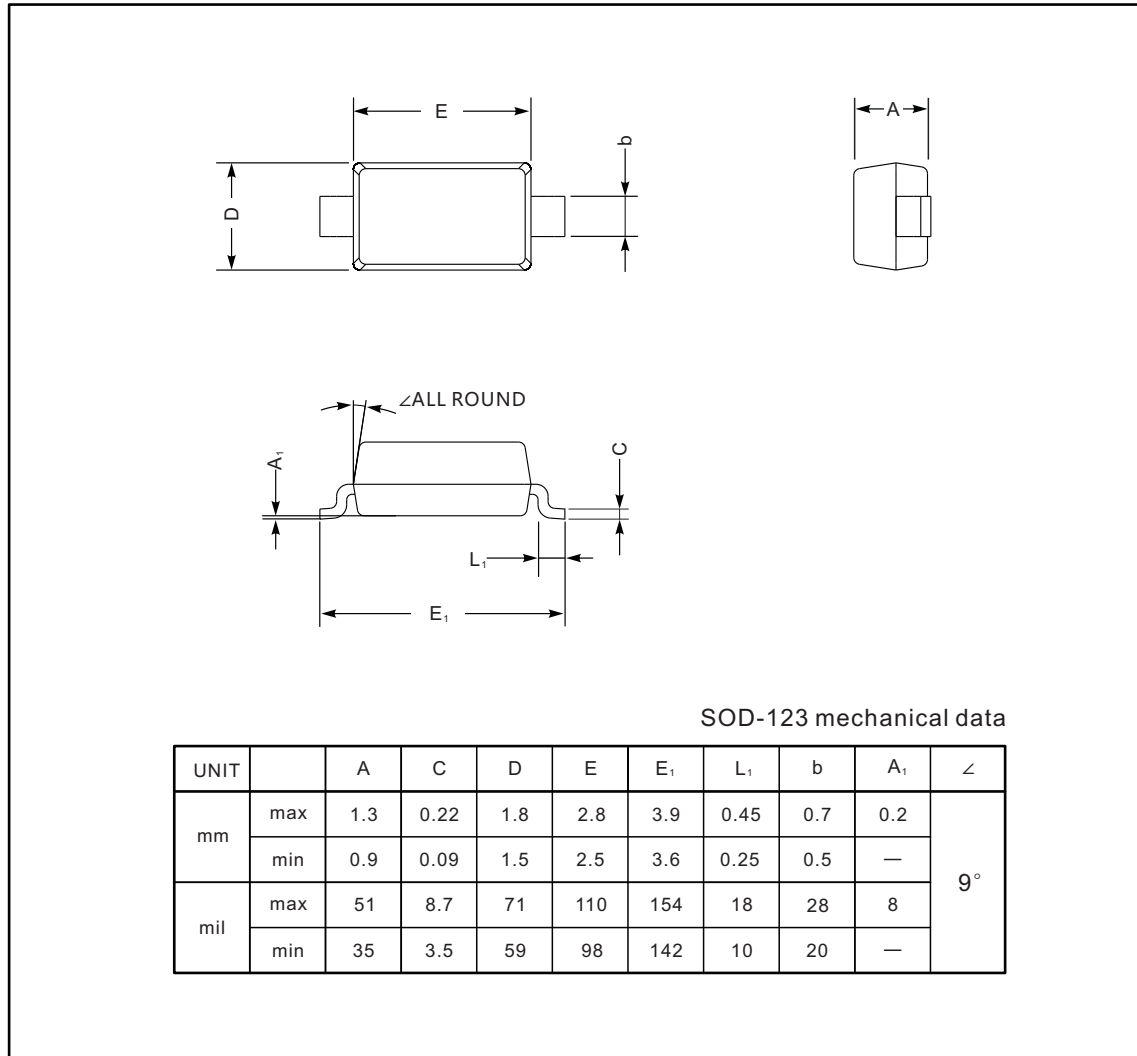


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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



The recommended mounting pad size

