

BAV19W AT/ BAV20WAT / BAV21WAT

FEATURES

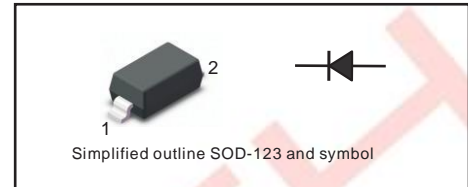
- ◆ For surface mounted applications
- ◆ Glass Passivated Chip Junction
- ◆ Fast reverse recovery time
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆ Case: SOD-123

PINNING

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



Absolute Maximum Ratings at 25 °C

| Parameter | Symbols | BAV19WAT | BAV20WAT | BAV21WAT | Units |
|---|----------------|-------------|----------|----------|-------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 120 | 200 | 250 | V |
| Maximum RMS voltage | V_{RMS} | 100 | 150 | 200 | V |
| Continuous Forward Current | I_F | 250 | | | mA |
| Repetitive Peak Forward Current | I_{FRM} | 625 | | | mA |
| Non-reptitive Peak Forward Surge Current at 1s at 1ms at 1us | I_{FSM} | 1 3 9 | | | A |
| Total Power Dissipation | P_{tot} | 500 | | | mW |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | | | °C |

Characteristics at $T_a = 25\text{ °C}$

| Parameter | Symbols | BAV19WAT | BAV20WAT | BAV21WAT | Units |
|---|-------------|--------------|----------|----------|---------|
| Reverse Breakdown Voltage at $I_R=100\mu A$ | $V_{(BR)R}$ | 120 | 200 | 250 | V |
| Maximum Forward Voltage at 100 mA at 200 mA | V_F | 1.00 1.25 | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ °C}$ $T_a = 150\text{ °C}$ | I_R | 0.1 100 | | | μA |
| Typical Junction Capacitance at $V_R=4V, f=1MHz$ | C_j | 5 | | | pF |
| Maximum Reverse Recovery Time | t_{rr} | 50 | | | ns |

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Typical Characteristics Curves

Fig.1 Forward Current Derating Curve

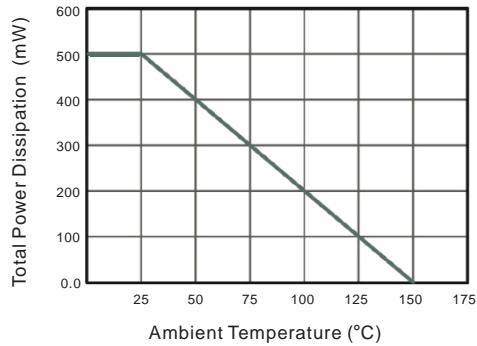


Fig.2 Typical Reverse Characteristics

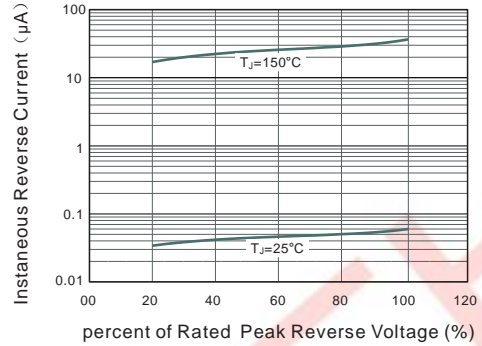


Fig.3 Typical Instantaneous Forward Characteristics

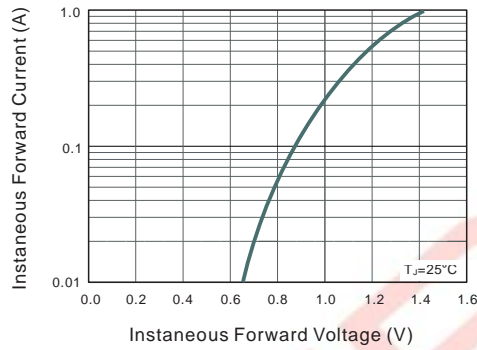
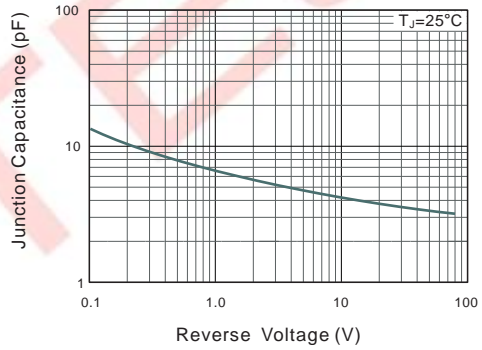


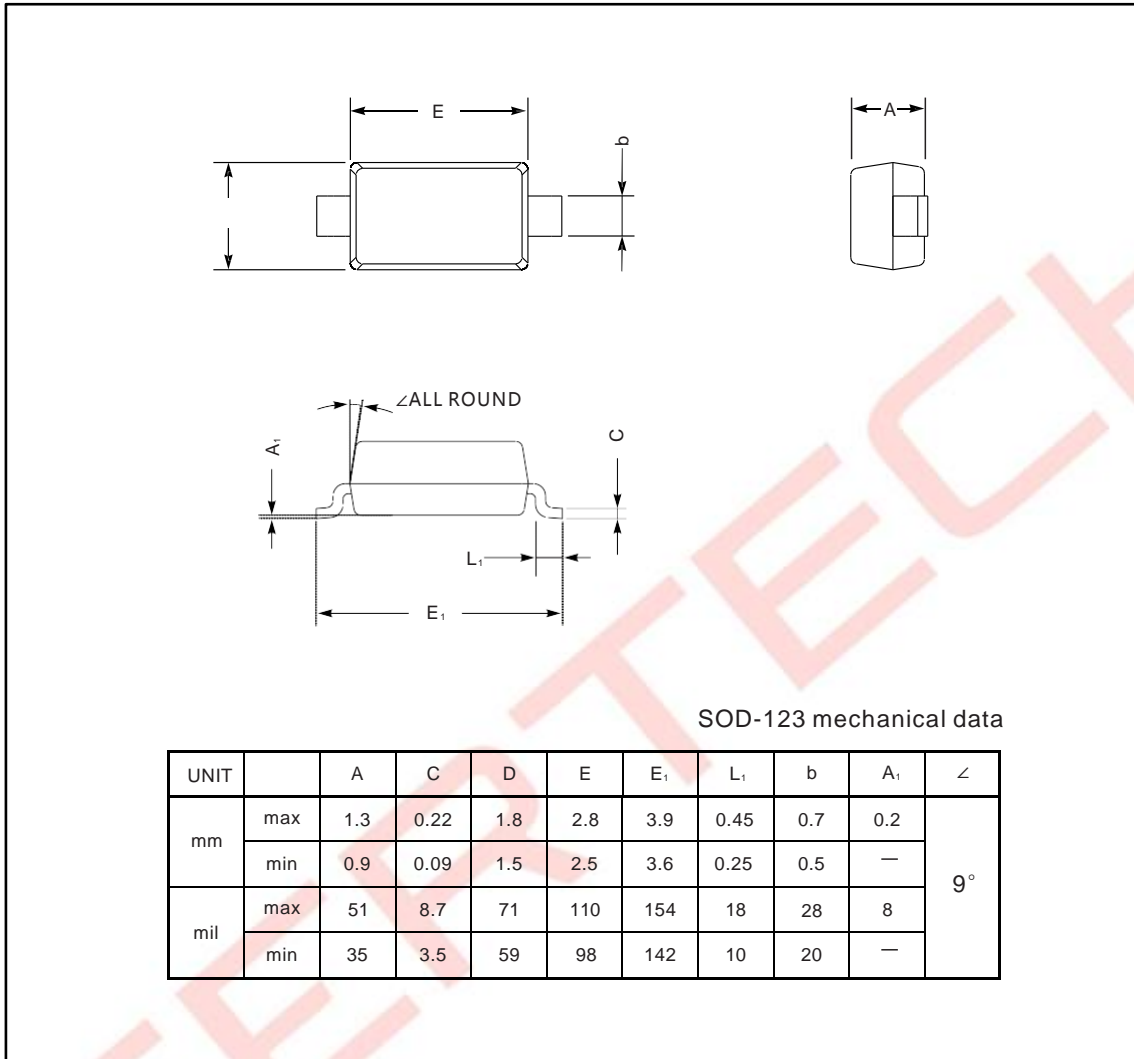
Fig.4 Typical Junction Capacitance



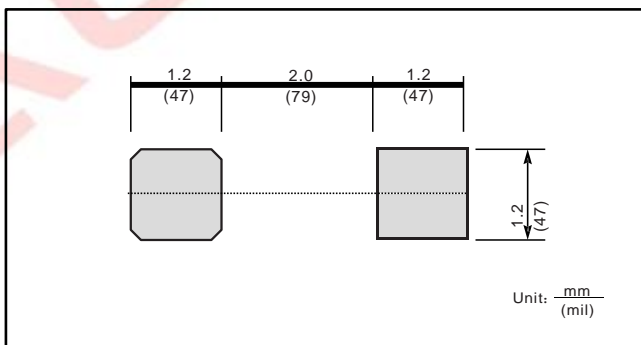
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Package outline

SOD-123



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| BAV19WAT | A8 |
| BAV20WAT | T2 |
| BAV21WAT | T3 |