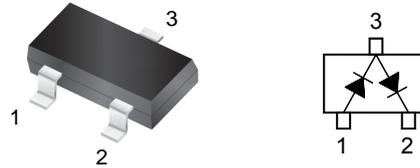


Dual Switching Diode in SOT-23

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Mechanical Data

- **Case:** SOT-23 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- Single Switch
- Polarity Protection

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

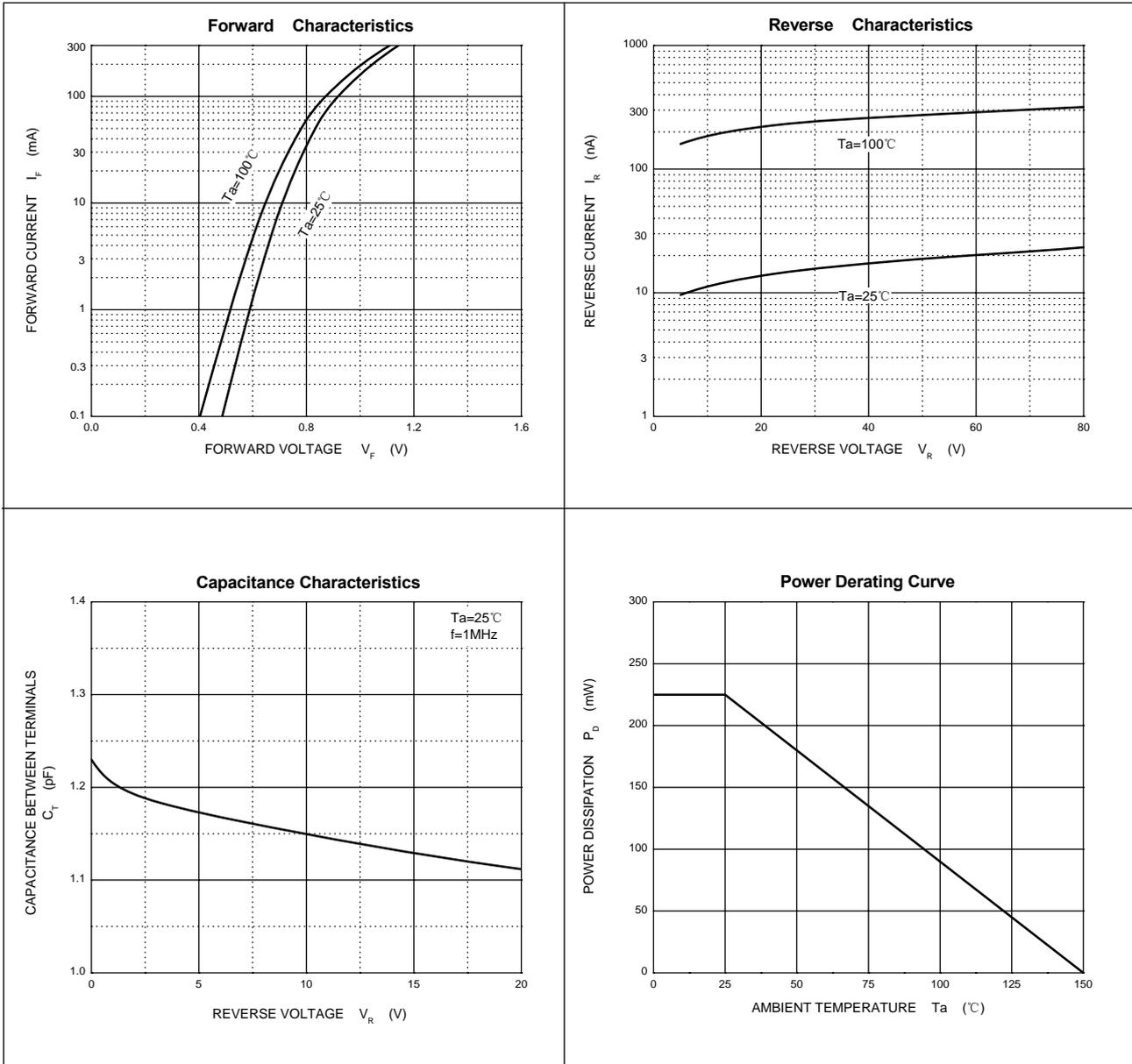
| Parameter | Symbol | Limit | Unit |
|---|-----------------|----------|------|
| Reverse Voltage | V_R | 70 | V |
| Forward Current | I_F | 200 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$ | I_{FSM} | 2.0 | A |
| Power Dissipation | P_D | 225 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 556 | °C/W |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature range | T_{STG} | -55~+150 | °C |

Electrical Characteristics

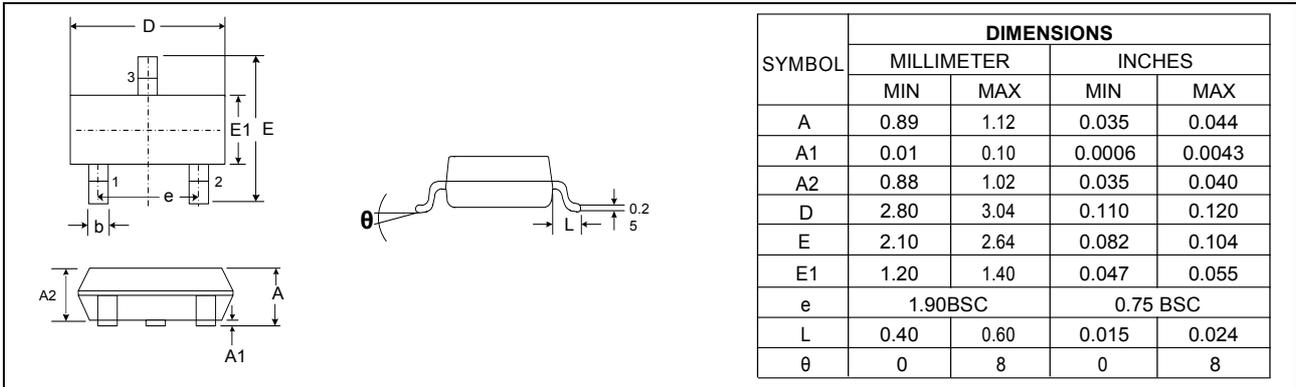
($T_A = 25\text{ °C}$ unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|----------|-----|-----|-------|---------|---|
| Reverse breakdown voltage | V_R | 70 | | | V | $I_R=100\mu A$ |
| Forward voltage | V_{F1} | | | 0.715 | V | $I_F=1mA$ |
| | V_{F2} | | | 0.855 | V | $I_F=10mA$ |
| | V_{F3} | | | 1 | V | $I_F=50mA$ |
| | V_{F4} | | | 1.25 | V | $I_F=150mA$ |
| Reverse current | I_R | | | 2.5 | μA | $V_R=70V$ |
| Capacitance between terminals | C_T | | | 1.5 | pF | $V_R=0, f=1MHz$ |
| Reverse recovery time | t_{rr} | | | 6 | ns | $I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$ |

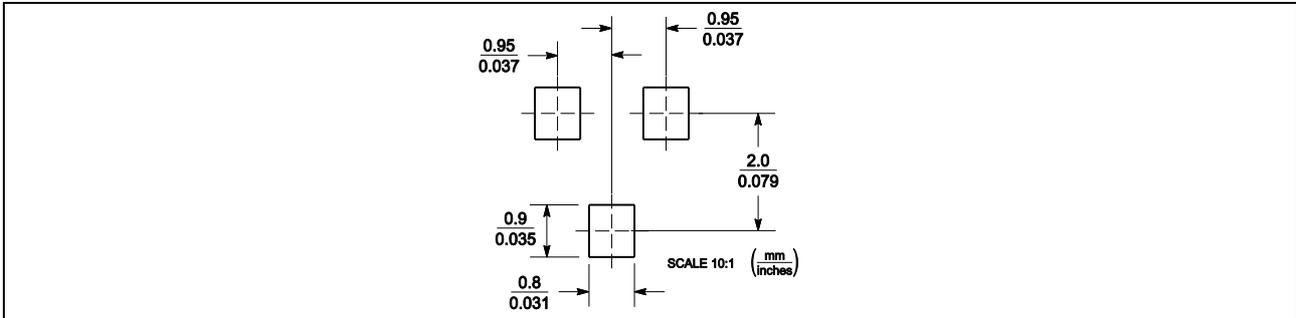
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



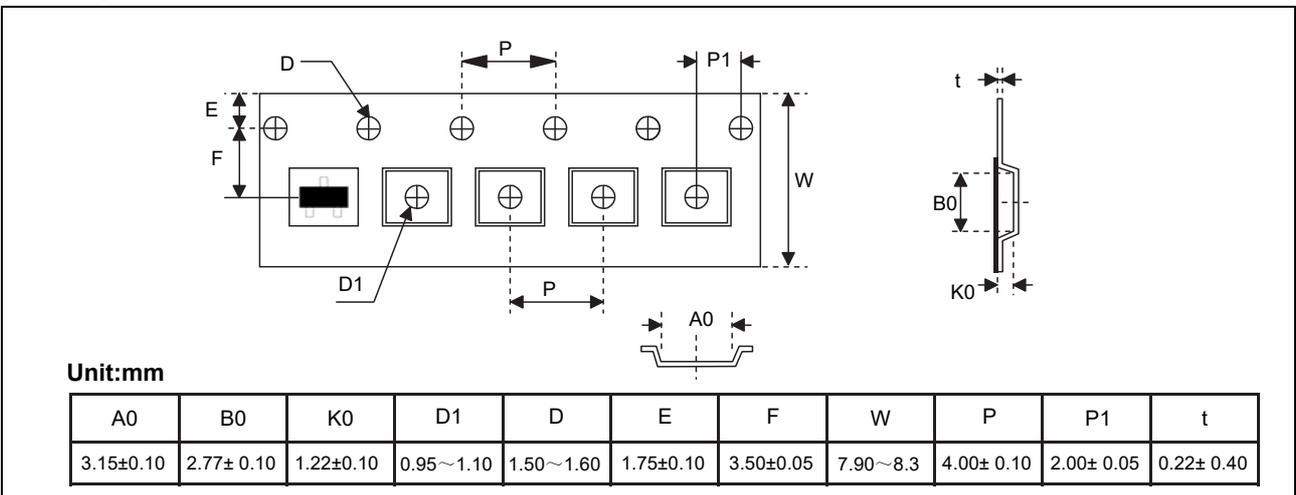
Package Dimensions



Pad Dimensions



Package Information



Ordering information

| Order code | Package | Marking | Packaging option | Base quantity | Packaging specification |
|------------|---------|---------|------------------|----------------|-------------------------|
| BAV99 | SOT-23 | A7 | Tape and reel | 3000pcs / reel | EIA STD RS-481 |

Revision history

| Date | Revision | Changes |
|-------------|----------|-----------------|
| 23-May-2012 | 1.0 | Initial release |

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