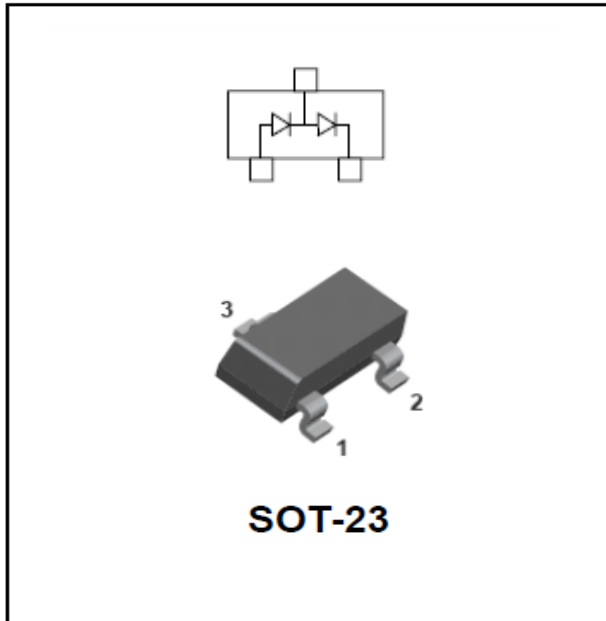


Dual Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Fast switching speed
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** A7

■ Maximum Ratings (Ta=25°C Unless otherwise specified)

| Item | Symbol | Unit | Value |
|---|------------|------|-------------|
| Peak Reverse Voltage | V_{RRM} | V | 100 |
| Reverse Voltage | V_R | V | 75 |
| Forward Continuous Current@f>=50Hz, Per Leg | I_F | mA | 200 |
| Non-Repetitive Peak Forward Surge Current @8.3ms, Half sine-wave, Per Leg | I_{FSM} | A | 2.0 |
| Power Dissipation | P_D | mW | 350 |
| Maximum Thermal Resistance | R_{thJA} | °C/W | 357 |
| Operating Junction Temperature | T_J | °C | 150 |
| Storage Temperature | T_{STG} | °C | -55 to +150 |

■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| BAV99 | F2 | Approximate 0.008 | 3000 | 30000 | 120000 | 7" reel |

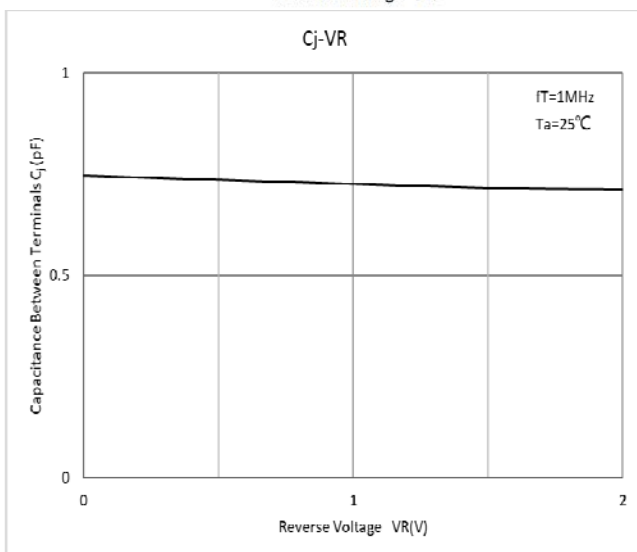
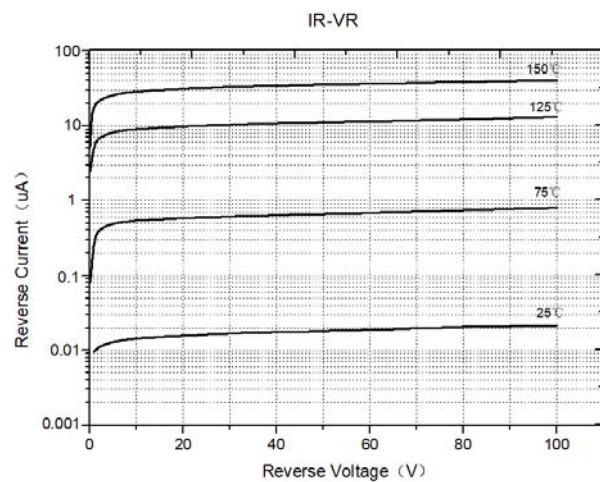
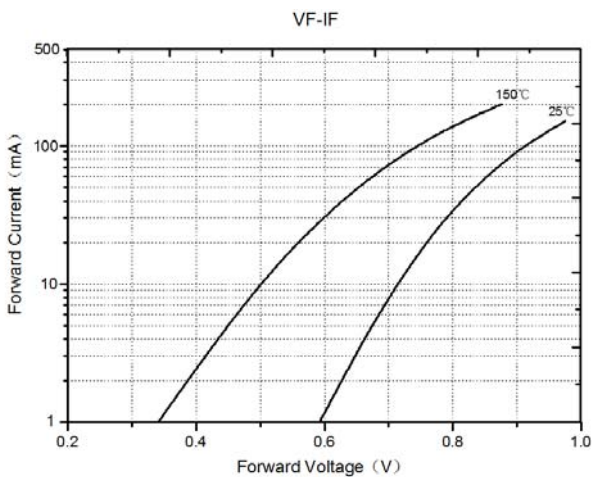


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■ Electrical Characteristics (Ta=25°C Unless otherwise specified, Per Leg)

| Item | Symbol | Unit | Conditions | Value |
|------------------------------|----------|---------|---|-------|
| Reverse Voltage | V_R | V | $I_R=100\mu A$ | 75 |
| Forward Voltage | V_F | V | $I_F=1mA$ | 0.715 |
| | | | $I_F=10mA$ | 0.855 |
| | | | $I_F=50mA$ | 1.00 |
| | | | $I_F=150mA$ | 1.25 |
| Maximum DC Reverse Current | I_R | μA | $V_R=75V$ | 2.5 |
| Typical Junction Capacitance | C_J | pF | $f=1.0MHz, V_R=0V$ | 4 |
| Reverse Recovery Time | T_{rr} | ns | $I_F=10mA, V_R=6V, R_L=100\Omega, I_{rr}=1mA$ | 4 |

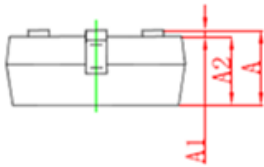
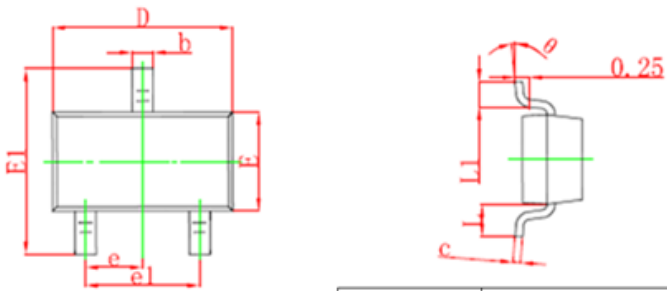
■ Typical Characteristics (Per Leg)





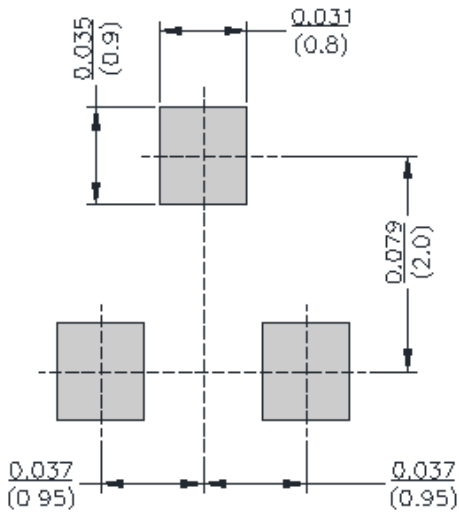
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■SOT-23 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.100 | 0.200 | 0.004 | 0.008 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950TYP | | 0.037TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550REF | | 0.022REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |

■SOT-23 Suggested Pad Layout





BAV99

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