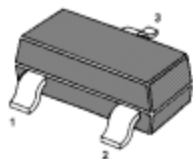
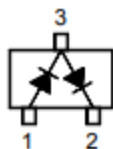


BAV99 Silicon Epitaxial Planar Switching Diode

Fast switching in thick and thin-film circuits diode



Marking Code: **A7**
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

| Parameter | Symbol | Value | Unit | |
|--|-----------|--|------------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 85 | V | |
| Continuous Reverse Voltage | V_R | 75 | V | |
| Continuous Forward Current (Double Diode Loaded) | I_F | 125 | mA | |
| Continuous Forward Current (Single Diode Loaded) | I_F | 215 | mA | |
| Repetitive Peak Forward Current | I_{FRM} | 450 | mA | |
| Non-repetitive Peak Forward Surge Current | I_{FSM} | at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$ | 0.5 1 4.5 | A |
| Power Dissipation | | P_{tot} | 350 | mW |
| Junction Temperature | | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | - 65 to + 150 | $^\circ\text{C}$ | |

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

| Parameter | Symbol | Max. | Unit | | |
|---|--------|-----------------------------|------|---|----|
| Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$ | V_F | 0.715 0.855 1 1.25 | V | | |
| Reverse Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$ | | 30 1 30 50 | | nA μA μA μA | |
| Diode Capacitance at $V_R = 0$, $f = 1\text{ MHz}$ | | C_d | | 1.5 | pF |
| Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_R = 1\text{ mA}$, $R_L = 100\text{ }\Omega$ | | t_{rr} | | 4 | ns |