

FEATURES

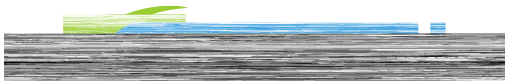
Fast Switching Speed
 For General Purpose Switching Applications
 High Conductance

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 $t = 1\text{ s}$ 0.5 | A |
| | | at $t = 1\text{ ms}$ 1 | |
| | | at $t = 1\text{ }\mu\text{s}$ 4.5 | |
| 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 | V |
| | | 0.855 | |
| | | 1 | |
| | | 1.25 | |
| 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 $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$ | I_R | 30 | nA |
| | | 1 | μA |
| | | 30 | μA |
| | | 50 | μA |
| Diode Capacitance at $V_R = 0$, $f = 1\text{ MHz}$ | C_d | 1.5 | pF |
| Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_R = 1\text{ mA}$, $R_L = 100$ | t_{rr} | 4 | ns |



Typical Characteristics

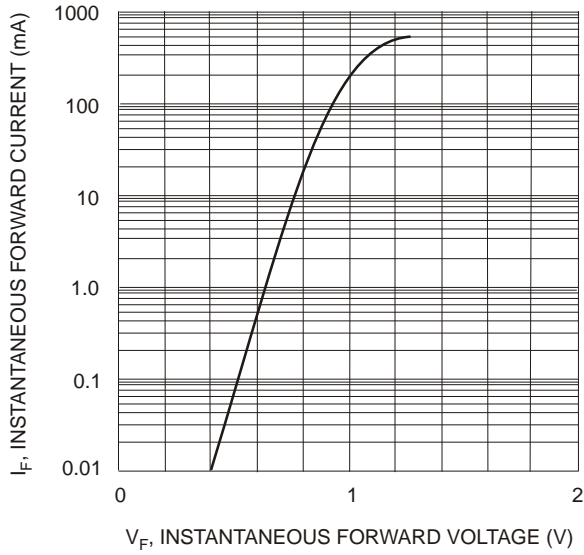


Fig. 1 Forward Characteristics

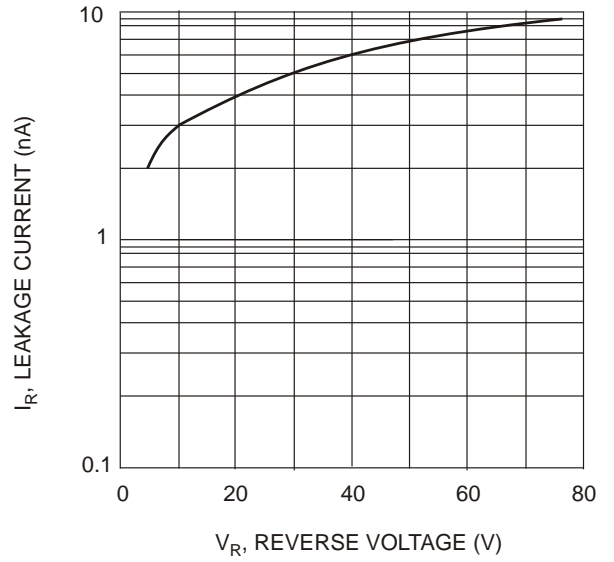


Fig. 2 Typical Leakage Current vs Reverse Voltage

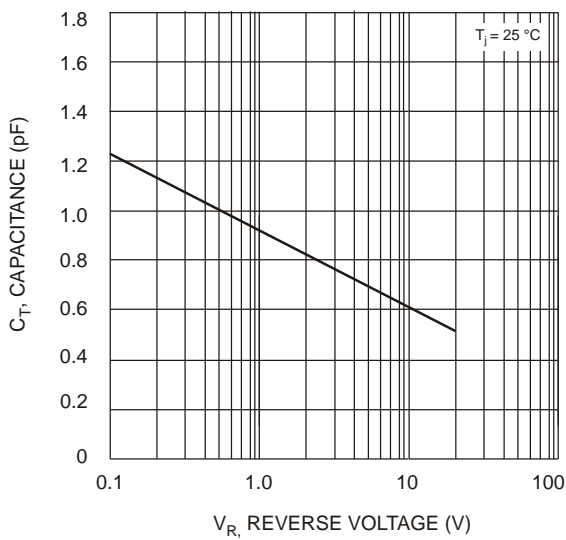


Fig. 3 Typical Total Capacitance vs Reverse Voltage



BAV99

Si ching Diode

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

