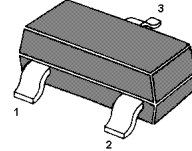
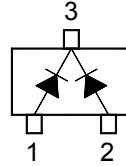


# BAV74

## SILICON PLANAR DUAL SWITCHING DIODE

High Speed Switching Dual Diodes



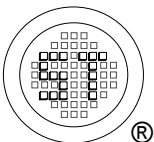
Marking Code: **A4**  
SOT-23 Plastic Package

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

| Parameter                            | Symbol              | Value                         | Unit             |
|--------------------------------------|---------------------|-------------------------------|------------------|
| Peak Repetitive Reverse Voltage      | $V_{RRM}$           | 60                            | V                |
| Continuous Reverse Voltage           | $V_R$               | 50                            | V                |
| Forward Current (DC)                 | Single Diode Loaded | 215                           | mA               |
|                                      | Double Diode Loaded | 125                           |                  |
| Repetitive Peak Forward Current      | $I_{FRM}$           | 450                           | mA               |
| Non-Repetitive Peak Forward Current  | $I_{FSM}$           | at $t = 1\text{ }\mu\text{s}$ | 4                |
|                                      |                     | at $t = 1\text{ ms}$          | 1                |
|                                      |                     | at $t = 1\text{ s}$           | 0.5              |
| Power Dissipation                    | $P_d$               | 350                           | mW               |
| Operating Junction Temperature Range | $T_J$               | 150                           | $^\circ\text{C}$ |
| Storage Temperature Range            | $T_S$               | - 55 to + 150                 | $^\circ\text{C}$ |

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

| Parameter   | Symbol   | Max.  | Unit |
|---|----------|---|------|
| Forward Voltage   | $V_F$    | at $I_F = 1\text{ mA}$                                  | 715  |
|   |          | at $I_F = 10\text{ mA}$                                 | 855  |
|   |          | at $I_F = 50\text{ mA}$                                 | 1    |
|   |          | at $I_F = 150\text{ mA}$                                | 1.25 |
| Reverse Current   | $I_R$    | at $V_R = 25\text{ V}$                                  | 30   |
|   |          | at $V_R = 50\text{ V}$                                  | 0.1  |
|   |          | at $V_R = 25\text{ V}, T_J = 150\text{ }^\circ\text{C}$ | 30   |
|   |          | at $V_R = 50\text{ V}, T_J = 150\text{ }^\circ\text{C}$ | 100  |
| Diode Capacitance   | $C_d$    | 2   | pF   |
| at $f = 1\text{ MHz}$   |          |   |      |
| Reverse Recovery Time   | $t_{rr}$ | 4   | ns   |
| at $I_F = I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}, R_L = 100\text{ }\Omega$ |          |   |      |



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506088

Dated : 10/10/2008

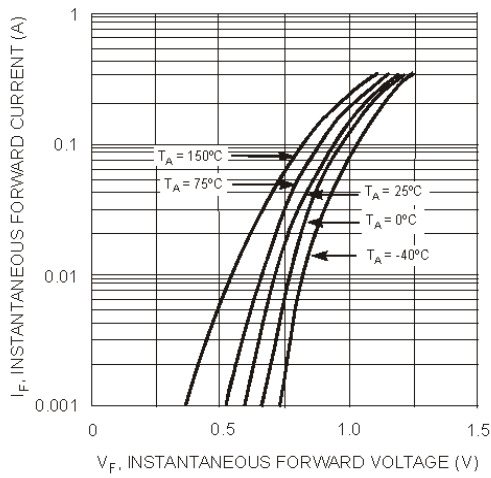


Fig. 1 Forward Characteristics

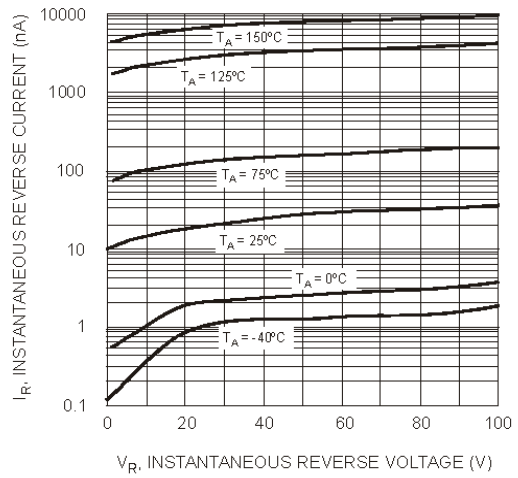


Fig. 2 Typical Reverse Characteristics

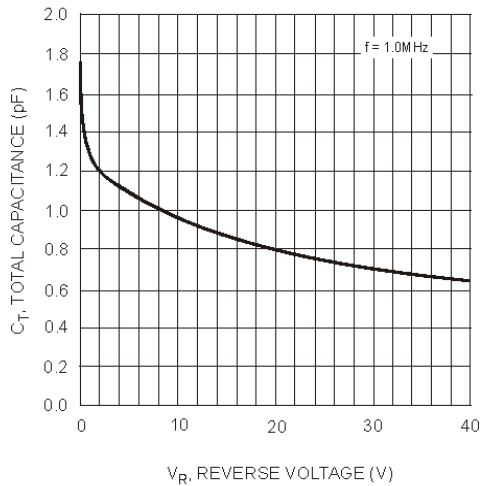


Fig. 3 Typical Capacitance vs. Reverse Voltage

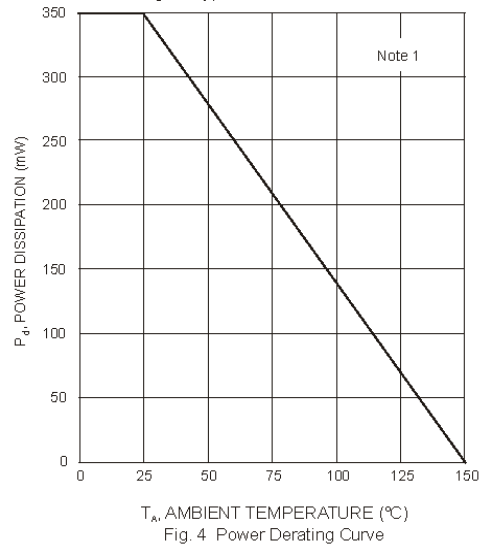
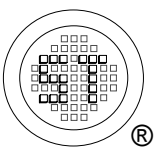


Fig. 4 Power Derating Curve



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