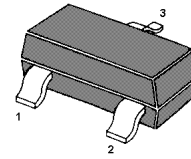
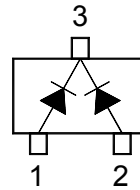


# BAV70

## Silicon Epitaxial Planar Switching Diode

### Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Marking Code: **A4**  
TO-236 Plastic Package

### Applications

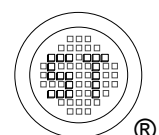
- Ultra high speed switching application

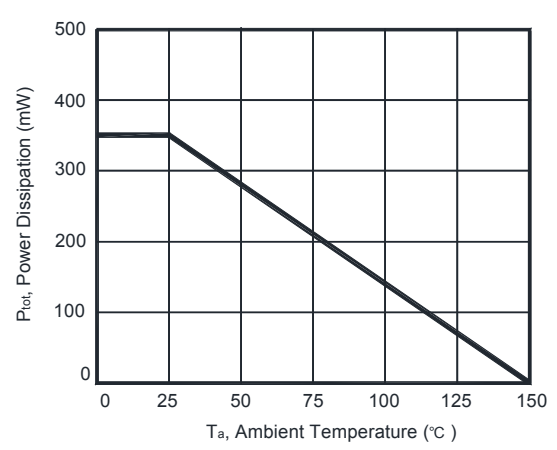
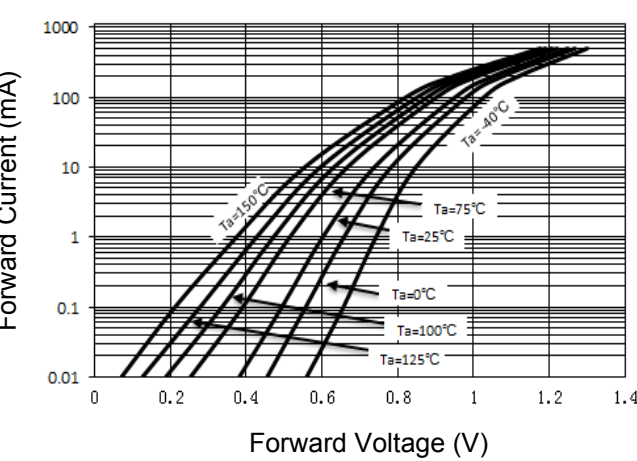
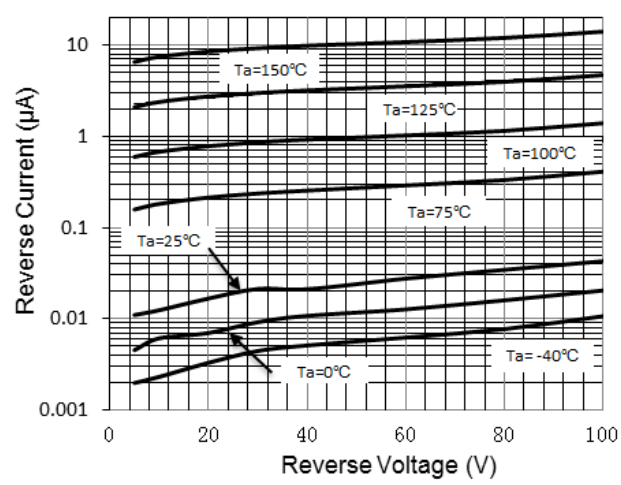
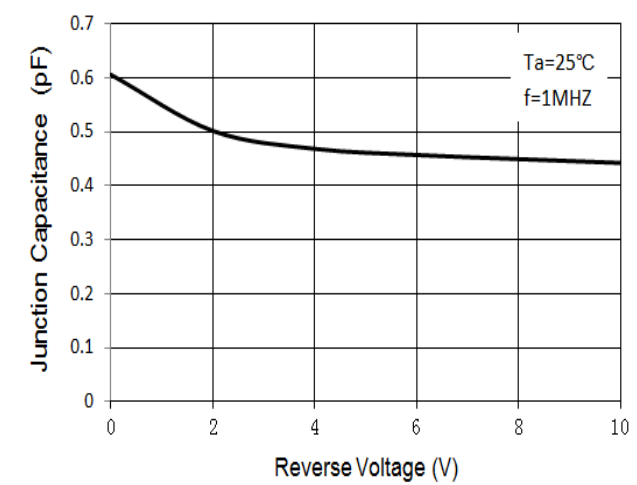
### Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )

| Parameter                                 | Symbol    | Value                              | Unit               |
|-------------------------------------------|-----------|------------------------------------|--------------------|
| Maximum Peak Reverse Voltage              | $V_{RM}$  | 100                                | V                  |
| Reverse Voltage                           | $V_R$     | 75                                 | V                  |
| Average Forward Current                   | $I_O$     | 200                                | mA                 |
| Maximum Peak Forward Current              | $I_{FM}$  | 300                                | mA                 |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$ | at $t = 1\text{ s}$<br>1           | A                  |
|                                           |           | at $t = 1\text{ }\mu\text{s}$<br>2 |                    |
| Power Dissipation                         | $P_D$     | 350                                | mW                 |
| Junction Temperature                      | $T_j$     | 150                                | $^{\circ}\text{C}$ |
| Storage Temperature Range                 | $T_{stg}$ | - 55 to + 150                      | $^{\circ}\text{C}$ |

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

| Parameter                                                                              | Symbol      | Min. | Max. | Unit          |
|----------------------------------------------------------------------------------------|-------------|------|------|---------------|
| Forward Voltage                                                                        | $V_F$       | -    | 715  | mV            |
| at $I_F = 1\text{ mA}$                                                                 |             |      | 855  | mV            |
| at $I_F = 10\text{ mA}$                                                                |             |      | 1    | V             |
| at $I_F = 150\text{ mA}$                                                               |             |      | 1.25 | V             |
| Reverse Current                                                                        | $I_R$       | -    | 25   | nA            |
| at $V_R = 20\text{ V}$                                                                 |             |      | 2.5  | $\mu\text{A}$ |
| at $V_R = 75\text{ V}$                                                                 |             |      | 30   | $\mu\text{A}$ |
| at $V_R = 25\text{ V}, T_J = 150\text{ }^{\circ}\text{C}$                              |             |      | 50   | $\mu\text{A}$ |
| Reverse Breakdown Voltage                                                              | $V_{(BR)R}$ | 75   | -    | V             |
| at $I_R = 100\text{ }\mu\text{A}$                                                      |             |      | -    | V             |
| Total Capacitance                                                                      | $C_T$       | -    | 2    | pF            |
| at $f = 1\text{ MHz}$                                                                  |             |      | 2    | pF            |
| Reverse Recovery Time                                                                  | $t_{rr}$    | -    | 4    | ns            |
| at $I_F = 10\text{ mA}, V_R = 6\text{ V}, I_{RR} = 0.1 * I_R, R_L = 100\text{ }\Omega$ |             |      | 4    | ns            |

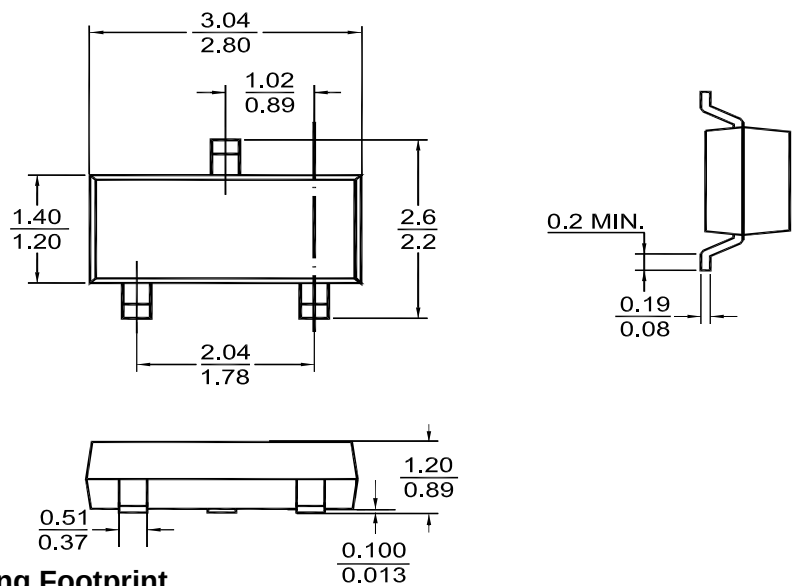




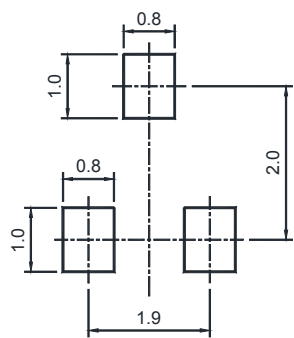
PACKAGE OUTLINE

Plastic surface mounted package (Dimensions in mm)

TO-236



Recommended Soldering Footprint



Packing information

| Package | Tape Width (mm) | Pitch   |               | Reel Size |      | Per Reel Packing Quantity |
|---------|-----------------|---------|---------------|-----------|------|---------------------------|
|         |                 | mm      | inch          | mm        | inch |                           |
| TO-236  | 8               | 4 ± 0.1 | 0.157 ± 0.004 | 178       | 7    | 3,000                     |

Marking information

" A4 " = Part No.  
"YM" = Date Code Marking  
"Y" = Year  
"M" = Month  
Font type: Arial

