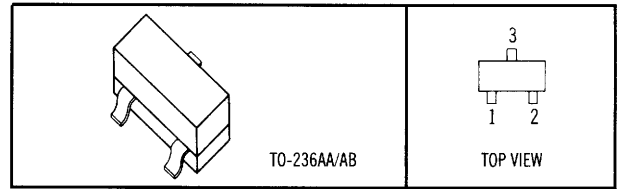


## SERIES BAV and BAW MICROMINIATURE DIODES

- Series BAS, BAV, and BAW consists of standard European single and dual diode types.
- Devices are molded in a TO-263AA (high-profile) or TO-236AB (low-profile) package. These packages are similar to the SOT23 package and is intended as an alternate to conventional "chip and wire" hybrid assembly techniques.
- $P_D$  (Max.) = 350 mW,  $T_J$  = 150°C (Max.)

FOR PACKAGE DIMENSIONS, SEE PAGE 117.



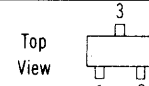
| Catalog Number | Description    | Marking | $V_{BR}$ |                        | $I_R$            |             | $V_F$    |              | $C_o$ Max. (pF) | $t_n$ (ns) |
|----------------|----------------|---------|----------|------------------------|------------------|-------------|----------|--------------|-----------------|------------|
|                |                |         | Min. (V) | @ $I_{BR}$ ( $\mu A$ ) | Max. ( $\mu A$ ) | @ $V_R$ (V) | Max. (V) | @ $I_F$ (mA) |                 |            |
| BAS16          | Single Diode   | A6      | 75       | 100                    | 1                | 75          | 0.72     | 1            | 2               | 6          |
| BAS19          | Single Diode   | A8      | 100      | 100                    | 0.1              | 90          | 1.25     | 200          | 5               | 50         |
| BAV70          | Common Cathode | A4      | 70       | 5                      | 5                | 70          | 0.86     | 10           | 1.5             | 6          |
| BAV74          | Common Cathode | JA      | 50       | 5                      | 0.1              | 50          | 1        | 100          | 2               | 4          |
| BAV99          | Dual in Series | A7      | 70       | 100                    | 2.5              | 70          | 1.1      | 50           | 1.5             | 6          |
| BAW56          | Common Anode   | A1      | 70       | 2.5                    | 2.5              | 70          | 1.1      | 50           | 2               | 6          |

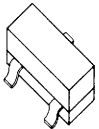
Pin Connections: Common Anode—1 Cathode, 2 Cathode, 3 Anode. Common Cathode—1 Anode, 2 Anode, 3 Cathode. Single Diode—1 Anode, 2 Open, 3 Cathode. Dual in Series—1 Anode, 2 Cathode, 3 Cathode and Anode. Part numbers shown above are for the high-profile package. To order the low profile package, add an "L" to the part number. For example, BAS16 = high-profile; BAS16L = low profile.

## SERIES BZX MICROMINIATURE ZENER DIODES

- Series BZX consists of standard European Zener diode types.
- Devices are molded in a TO-236AA (high-profile) or TO-236AB (low-profile) package. These packages are similar to the SOT package and is intended as an alternate to the conventional "chip and wire" hybrid assembly techniques.
- $P_D$  (Max.) = 350 mW,  $T_J$  = +150°C (Max.)

FOR PACKAGE DIMENSIONS, SEE PAGE 117.

| PINNING                |                                                                                    |       |         |
|------------------------|------------------------------------------------------------------------------------|-------|---------|
| Top View               |  |       |         |
| Pinning <sup>(4)</sup> | 1                                                                                  | 2     | 3       |
| Standard               | Anode                                                                              | Open  | Cathode |
| Reverse                | Open                                                                               | Anode | Cathode |



TO-236AA/AB

See Note 4 and 5.

| Catalog Number (2) (4) | Marking | Zener Voltage $V_Z$ @ $T_J T$ |                     | Zener Current $I_{ZM}$ (mA) | Maximum Reverse Leakage Current |            | $Z_{IT}$ @ $I_Z = 5$ mA $\Omega$ Max. |
|------------------------|---------|-------------------------------|---------------------|-----------------------------|---------------------------------|------------|---------------------------------------|
|                        |         | V Min.                        | V Max.              |                             | $I_R$ (mA)                      | $V_{R(V)}$ |                                       |
| BZX84C4V7              | Z1      | 4.4                           | 5                   | 5                           | 3                               | 2          | 80                                    |
| BZX84C5V1              | Z2      | 4.8                           | 5.4                 | 5                           | 2                               | 2          | 60                                    |
| BZX84C5V6              | Z3      | 5.2                           | 6                   | 5                           | 1                               | 2          | 40                                    |
| BZX84C6V2              | Z4      | 5.8                           | 6.6                 | 5                           | 3                               | 4          | 10                                    |
| BZX84C6V8              | Z5      | 6.4                           | 7.2                 | 5                           | 2                               | 4          | 15                                    |
| BZX84C7V5              | Z6      | 7                             | 7.9                 | 5                           | 1                               | 5          | 15                                    |
| BZX84C8V2              | Z7      | 7.7                           | 8.7                 | 5                           | .7                              | 5          | 15                                    |
| BZX84C9V1              | Z8      | 8.5                           | 9.6                 | 5                           | .5                              | 6          | 15                                    |
| BZX84C10               | Z9      | 9.4                           | 10.6                | 5                           | .2                              | 7          | 20                                    |
| BZX84C11               | Y1      | 10.4                          | 11.6                | 5                           | .1                              | 8          | 20                                    |
| BZX84C12               | Y2      | 11.4                          | 12.7                | 5                           | .1                              | 8          | 25                                    |
| BZX84C13               | Y3      | 12.4                          | 14.1                | 5                           | .1                              | 8          | 30                                    |
| BZX84C15               | Y4      | 13.8                          | 15.6                | 5                           | .05                             | 10.5       | 30                                    |
| BZX84C16               | Y5      | 15.3                          | 17.1                | 5                           | .05                             | 11.2       | 40                                    |
| BZX84C18               | Y6      | 16.8                          | 19.1                | 5                           | .05                             | 12.6       | 45                                    |
| BZX84C20               | Y7      | 18.8                          | 21.2                | 5                           | .05                             | 14         | 55                                    |
| BZX84C22               | Y8      | 20.8                          | 23.3                | 5                           | .05                             | 15.4       | 55                                    |
| BZX84C24               | Y9      | 22.8                          | 25.6                | 5                           | .05                             | 16.8       | 70                                    |
| BZX84C27               | Y10     | 25.1 <sup>(1)</sup>           | 28.9 <sup>(1)</sup> | 2                           | .05                             | 18.9       | 80 <sup>(1)</sup>                     |
| BZX84C30               | Y11     | 28 <sup>(1)</sup>             | 32 <sup>(1)</sup>   | 2                           | .05                             | 21         | 80 <sup>(1)</sup>                     |
| BZX84C33               | Y12     | 31 <sup>(1)</sup>             | 35 <sup>(1)</sup>   | 2                           | .05                             | 23.1       | 80 <sup>(1)</sup>                     |

NOTES: 1.  $r_{diff}$  @  $I_Z = 2.0$  mA 2.  $T_A = +25^\circ C$  3. Consult factory for complete technical data. 4. Available in standard and reverse pin-out. Standard pin-out catalog numbers shown. For reverse pin-out add 'R' suffix to catalog number. Example: BZX84C4V7 standard pin-out; BZX84C4V7R reverse pin-out. 5. Part numbers shown above are for the high-profile package and standard pinouts. To order the low-profile package, add an "L" to the part number. To order reverse pinouts, end the part number with an "R."