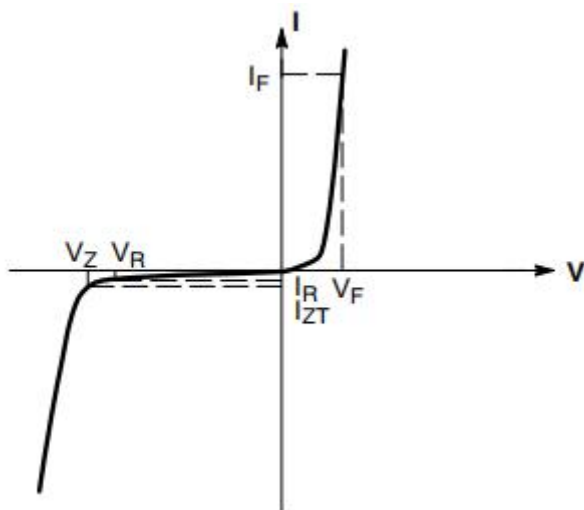


SOD-123 Surface Mounted Zener Diode 表面贴装稳压二极管



■ Absolute Maximum Ratings 最大额定值

| Characteristic<br>特性参数                      | Symbol<br>符号                        | Rat<br>额定值                                        | Unit<br>单位                |
|---------------------------------------------|-------------------------------------|---------------------------------------------------|---------------------------|
| Power dissipation<br>耗散功率                   | $P_D$<br>( $T_a=25^\circ\text{C}$ ) | 500                                               | mW                        |
| Thermal Resistance Junction-Ambient<br>热阻   | $R_{\theta JA}$                     | 250                                               | $^\circ\text{C}/\text{W}$ |
| Forward Voltage<br>正向电压                     | $V_F$<br>(@ $I_F=10\text{mA}$ )     | 0.9                                               | V                         |
| Reverse Voltage<br>反向电压                     | $V_Z$                               | 2-75                                              | V                         |
| Junction and Storage Temperature<br>结温和储藏温度 | $T_J, T_{stg}$                      | 150 $^\circ\text{C}$ , -65to+150 $^\circ\text{C}$ |                           |



■ Electrical Characteristics 电特性

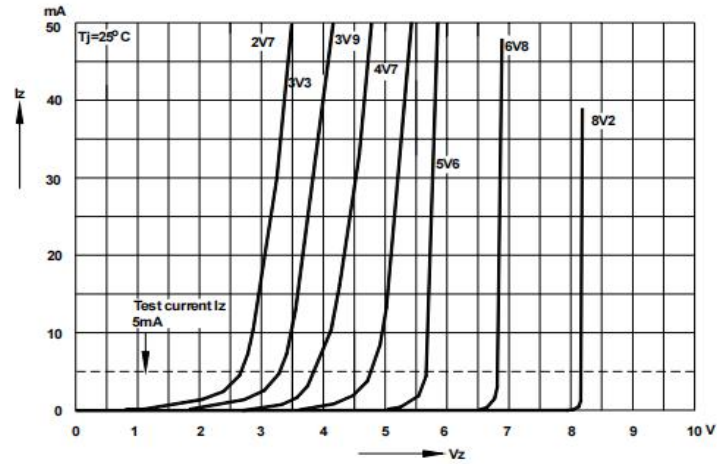
( $T_A=25^\circ\text{C}$  unless otherwise noted 如无特殊说明, 温度为 25 $^\circ\text{C}$ )

BZT52C2V4-BZT52C75

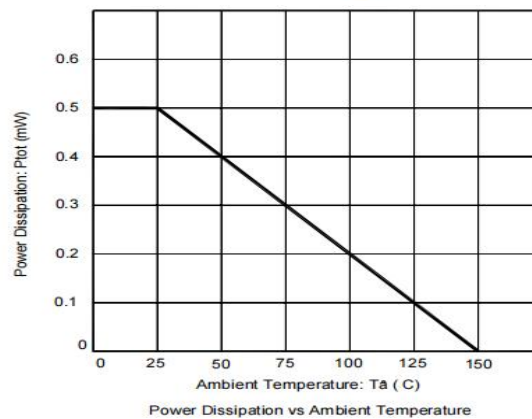
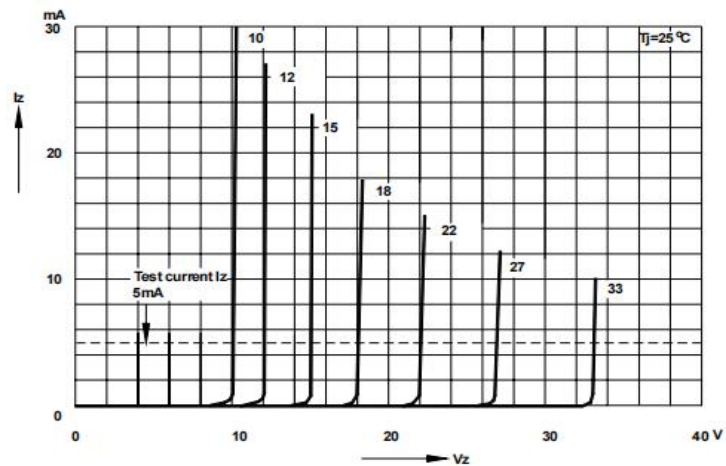
| Type      | V <sub>Z</sub> (V)稳压值 |      |      |                      | I <sub>R</sub> (μA)漏流 |                     | Z <sub>VT</sub> (ohm)阻抗 |                      | Z <sub>ZK</sub> (ohm)阻抗 |                      | Mark<br>印字 |
|-----------|-----------------------|------|------|----------------------|-----------------------|---------------------|-------------------------|----------------------|-------------------------|----------------------|------------|
|           | Nom                   | Min  | Max  | @I <sub>Z</sub> (mA) | Max                   | @V <sub>R</sub> (V) | Max                     | @I <sub>Z</sub> (mA) | Max                     | @I <sub>Z</sub> (mA) |            |
| BZT52C2V4 | 2.4                   | 2.2  | 2.6  | 5                    | 50                    | 1                   | 100                     | 5                    | 600                     | 1.0                  | WX         |
| BZT52C2V7 | 2.7                   | 2.5  | 2.9  | 5                    | 20                    | 1                   | 100                     | 5                    | 600                     | 1.0                  | W1         |
| BZT52C3V0 | 3.0                   | 2.8  | 3.2  | 5                    | 10                    | 1                   | 95                      | 5                    | 600                     | 1.0                  | W2         |
| BZT52C3V3 | 3.3                   | 3.1  | 3.5  | 5                    | 5                     | 1                   | 95                      | 5                    | 600                     | 1.0                  | W3         |
| BZT52C3V6 | 3.6                   | 3.4  | 3.8  | 5                    | 5                     | 1                   | 90                      | 5                    | 600                     | 1.0                  | W4         |
| BZT52C3V9 | 3.9                   | 3.7  | 4.1  | 5                    | 3                     | 1                   | 90                      | 5                    | 600                     | 1.0                  | W5         |
| BZT52C4V3 | 4.3                   | 4.0  | 4.6  | 5                    | 3                     | 1                   | 90                      | 5                    | 600                     | 1.0                  | W6         |
| BZT52C4V7 | 4.7                   | 4.4  | 5.0  | 5                    | 3                     | 2                   | 80                      | 5                    | 500                     | 1.0                  | W7         |
| BZT52C5V1 | 5.1                   | 4.8  | 5.4  | 5                    | 2                     | 2                   | 60                      | 5                    | 480                     | 1.0                  | W8         |
| BZT52C5V6 | 5.6                   | 5.2  | 6.0  | 5                    | 1                     | 2                   | 40                      | 5                    | 400                     | 1.0                  | W9         |
| BZT52C6V2 | 6.2                   | 5.8  | 6.6  | 5                    | 3                     | 4                   | 10                      | 5                    | 150                     | 1.0                  | WA         |
| BZT52C6V8 | 6.8                   | 6.4  | 7.2  | 5                    | 2                     | 4                   | 15                      | 5                    | 80                      | 1.0                  | WB         |
| BZT52C7V5 | 7.5                   | 7.0  | 7.9  | 5                    | 1                     | 5                   | 15                      | 5                    | 80                      | 1.0                  | WC         |
| BZT52C8V2 | 8.2                   | 7.7  | 8.7  | 5                    | 0.7                   | 5                   | 15                      | 5                    | 80                      | 1.0                  | WD         |
| BZT52C9V1 | 9.1                   | 8.5  | 9.6  | 5                    | 0.5                   | 6                   | 15                      | 5                    | 100                     | 1.0                  | WE         |
| BZT52C10  | 10                    | 9.4  | 10.6 | 5                    | 0.2                   | 7                   | 20                      | 5                    | 150                     | 1.0                  | WF         |
| BZT52C11  | 11                    | 10.4 | 11.6 | 5                    | 0.1                   | 8                   | 20                      | 5                    | 150                     | 1.0                  | WG         |
| BZT52C12  | 12                    | 11.4 | 12.7 | 5                    | 0.1                   | 8                   | 25                      | 5                    | 150                     | 1.0                  | WH         |
| BZT52C13  | 13                    | 12.4 | 14.1 | 5                    | 0.1                   | 8                   | 30                      | 5                    | 170                     | 1.0                  | WI         |
| BZT52C15  | 15                    | 13.8 | 15.6 | 5                    | 0.05                  | 10.5                | 30                      | 5                    | 200                     | 1.0                  | WJ         |
| BZT52C16  | 16                    | 15.3 | 17.1 | 5                    | 0.05                  | 11.2                | 40                      | 5                    | 200                     | 1.0                  | WK         |
| BZT52C18  | 18                    | 16.8 | 19.1 | 5                    | 0.05                  | 12.6                | 45                      | 5                    | 225                     | 1.0                  | WL         |
| BZT52C20  | 20                    | 18.8 | 21.2 | 5                    | 0.05                  | 14.0                | 55                      | 5                    | 225                     | 1.0                  | WM         |
| BZT52C22  | 22                    | 20.8 | 23.3 | 5                    | 0.05                  | 15.4                | 55                      | 5                    | 250                     | 1.0                  | WN         |
| BZT52C24  | 24                    | 22.8 | 25.6 | 5                    | 0.05                  | 16.8                | 70                      | 5                    | 250                     | 1.0                  | WO         |
| BZT52C27  | 27                    | 25.1 | 28.9 | 2                    | 0.05                  | 18.9                | 80                      | 2                    | 300                     | 0.5                  | WP         |
| BZT52C30  | 30                    | 28.0 | 32.0 | 2                    | 0.05                  | 21.0                | 80                      | 2                    | 300                     | 0.5                  | WQ         |
| BZT52C33  | 33                    | 31.0 | 35.0 | 2                    | 0.05                  | 23.1                | 80                      | 2                    | 325                     | 0.5                  | WR         |
| BZT52C36  | 36                    | 34.0 | 38.0 | 2                    | 0.05                  | 25.2                | 90                      | 2                    | 350                     | 0.5                  | WS         |
| BZT52C39  | 39                    | 37.0 | 41.0 | 2                    | 0.05                  | 27.3                | 130                     | 2                    | 350                     | 0.5                  | WT         |
| BZT52C43  | 43                    | 40.0 | 46.0 | 2                    | 0.05                  | 30.1                | 150                     | 2                    | 375                     | 0.5                  | 6A         |
| BZT52C47  | 47                    | 44.0 | 50.0 | 2                    | 0.05                  | 32.9                | 170                     | 2                    | 375                     | 0.5                  | 6B         |
| BZT52C51  | 51                    | 48.0 | 54.0 | 2                    | 0.05                  | 35.7                | 180                     | 2                    | 400                     | 0.5                  | 6C         |
| BZT52C56  | 56                    | 52.0 | 60.0 | 2                    | 0.05                  | 39.2                | 200                     | 2                    | 425                     | 0.5                  | 6D         |
| BZT52C62  | 62                    | 58.0 | 66.0 | 2                    | 0.05                  | 43.4                | 215                     | 2                    | 450                     | 0.5                  | 6E         |
| BZT52C68  | 68                    | 64.0 | 72.0 | 2                    | 0.05                  | 47.6                | 240                     | 2                    | 475                     | 0.5                  | 6F         |
| BZT52C75  | 75                    | 70.0 | 79.0 | 2                    | 0.05                  | 52.5                | 255                     | 2                    | 500                     | 0.5                  | 6H         |

## ■ Typical Characteristic Curve 典型特性曲线

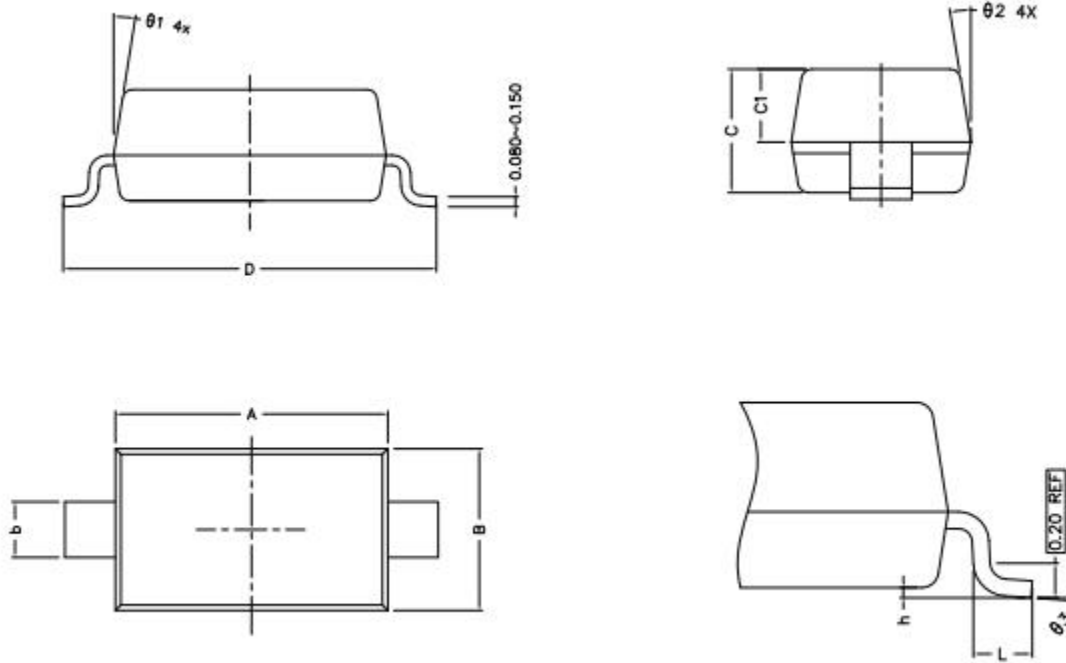
Breakdown characteristics  
 $T_j = \text{constant (pulsed)}$



Breakdown characteristics  
 $T_j = \text{constant (pulsed)}$



■Dimension 外形封装尺寸



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 2.600                     | 2.800 | 0.102                | 0.110 |
| B      | 1.500                     | 1.700 | 0.059                | 0.067 |
| C      | 1.050                     | 1.150 | 0.041                | 0.045 |
| C1     | 0.600                     | 0.700 | 0.024                | 0.028 |
| D      | 3.550                     | 3.850 | 0.140                | 0.152 |
| L      | 0.250                     | 0.450 | 0.010                | 0.018 |
| b      | 0.450                     | 0.650 | 0.018                | 0.026 |
| h      | 0.020                     | 0.120 | 0.001                | 0.005 |
| ⊖ 3    | 0°                        | 7°    | 0°                   | 7°    |