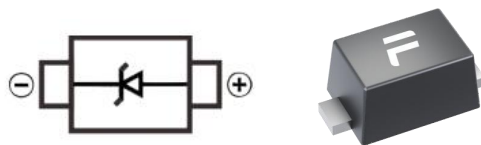


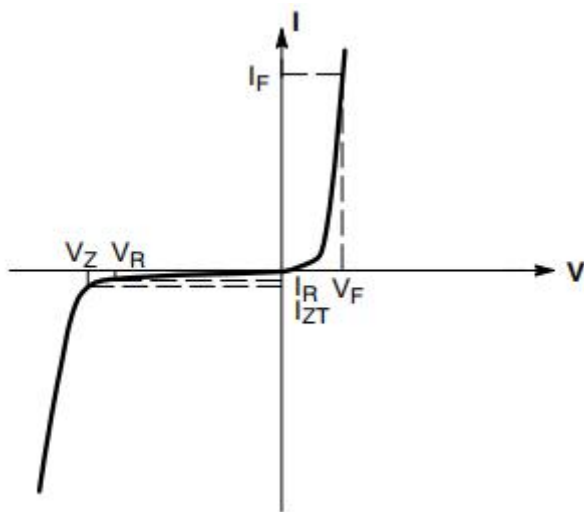
SOD-523 Surface Mounted Zener Diode 表面贴装稳压二极管

■SOD-523 Internal Configuration 内部结构



■Features 特点

| Characteristic<br>特性参数                      | Symbol<br>符号                        | Max<br>最大值         | Unit<br>单位 |
|---------------------------------------------|-------------------------------------|--------------------|------------|
| Power dissipation<br>耗散功率                   | $P_D$<br>( $T_a=25^\circ\text{C}$ ) | 200                | mW         |
| Forward Current<br>正向电流                     | $I_F$                               | 250                | mA         |
| 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                     | $V_Z$                               | 2.4-75             | V          |
| Junction and Storage Temperature<br>结温和储藏温度 | $T_J, T_{stg}$                      | 125°C, -55to+125°C |            |



■ Electrical Characteristics 电特性

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

| Type       | V <sub>Z</sub> (V)   |      | DIFFERENTIAL RESISTANCE r <sub>diff</sub> (Ω) |      |                      |      | TEMP. COEFF. S <sub>Z</sub> (mV/K) |      |       | I <sub>R</sub> (uA) |                 | Mark<br>ing |
|------------|----------------------|------|-----------------------------------------------|------|----------------------|------|------------------------------------|------|-------|---------------------|-----------------|-------------|
|            | @I <sub>Z</sub> =5mA |      | @I <sub>Z</sub> =1mA                          |      | @I <sub>Z</sub> =5mA |      | @I <sub>Z</sub> =5mA               |      |       | @V <sub>R</sub> (V) |                 |             |
|            | MIN.                 | MAX. | TYP.                                          | MAX. | TYP.                 | MAX. | MIN.                               | TYP. | MAX.  | I <sub>R</sub>      | @V <sub>R</sub> |             |
| BZX584C2V4 | 2. 2                 | 2. 6 | 325                                           | 600  | 80                   | 100  | -3.5                               | -2.1 | 0     | 50                  | 1               | Z11         |
| BZX584C2V7 | 2. 5                 | 2. 9 | 325                                           | 600  | 80                   | 100  | -3.5                               | -2.1 | 0     | 20                  | 1               | Z12         |
| BZX584C3V0 | 2.8                  | 3.2  | 325                                           | 600  | 80                   | 95   | -3.5                               | -2.1 | 0     | 10                  | 1               | Z13         |
| BZX584C3V3 | 3.1                  | 3.5  | 350                                           | 600  | 85                   | 95   | -3.5                               | -2.4 | 0     | 5                   | 1               | Z14         |
| BZX584C3V6 | 3.4                  | 3.8  | 375                                           | 600  | 85                   | 90   | -3.5                               | -2.4 | 0     | 5                   | 1               | Z15         |
| BZX584C3V9 | 3.7                  | 4.1  | 400                                           | 600  | 85                   | 90   | -3.5                               | -2.5 | 0     | 3                   | 1               | Z16         |
| BZX584C4V3 | 4.0                  | 4.6  | 400                                           | 600  | 85                   | 90   | -3.5                               | -2.5 | 0     | 3                   | 1               | Z17         |
| BZX584C4V7 | 4.4                  | 5.0  | 410                                           | 600  | 80                   | 90   | -3.5                               | -2.5 | 0     | 3                   | 2               | Z1          |
| BZX584C5V1 | 4.8                  | 5.4  | 425                                           | 500  | 50                   | 80   | -3.5                               | -1.4 | 0.2   | 2                   | 2               | Z2          |
| BZX584C5V6 | 5.2                  | 6.0  | 400                                           | 480  | 40                   | 60   | -2.7                               | -0.8 | 1.2   | 1                   | 2               | Z3          |
| BZX584C6V2 | 5.8                  | 6.6  | 80                                            | 400  | 15                   | 40   | -2.0                               | 1.2  | 2.5   | 3                   | 4               | Z4          |
| BZX584C6V8 | 6.4                  | 7.2  | 40                                            | 150  | 6                    | 10   | 0.4                                | 2.3  | 3.7   | 2                   | 4               | Z5          |
| BZX584C7V5 | 7.0                  | 7.9  | 30                                            | 80   | 6                    | 15   | 1.2                                | 3.0  | 4.5   | 1                   | 5               | Z6          |
| BZX584C8V2 | 7.7                  | 8.7  | 30                                            | 80   | 6                    | 15   | 2.5                                | 4.0  | 5.3   | 0.7                 | 5               | Z7          |
| BZX584C9V1 | 8.5                  | 9.6  | 40                                            | 80   | 6                    | 15   | 3.2                                | 4.6  | 6.2   | 0.5                 | 6               | Z8          |
| BZX584C10  | 9.4                  | 10.6 | 40                                            | 100  | 6                    | 15   | 3.8                                | 5.5  | 7.0   | 0.2                 | 7               | Z9          |
| BZX584C11  | 10.4                 | 11.6 | 50                                            | 150  | 8                    | 20   | 4.5                                | 6.4  | 8.0   | 0.1                 | 8               | Y1          |
| BZX584C12  | 11.4                 | 12.7 | 50                                            | 150  | 10                   | 20   | 5.4                                | 7.4  | 9.0   | 0.1                 | 8               | Y2          |
| BZX584C13  | 12.4                 | 14.1 | 50                                            | 150  | 10                   | 25   | 6.0                                | 8.4  | 10.0  | 0.1                 | 8               | Y3          |
| BZX584C15  | 13.8                 | 15.6 | 50                                            | 170  | 10                   | 30   | 7.0                                | 9.4  | 11.0  | 0.05                | 10.5            | Y4          |
| BZX584C16  | 15.3                 | 17.1 | 50                                            | 200  | 10                   | 30   | 9.2                                | 11.4 | 13.0  | 0.05                | 11.2            | Y5          |
| BZX584C18  | 16.8                 | 19.1 | 50                                            | 200  | 10                   | 40   | 10.4                               | 12.4 | 14.0  | 0.05                | 12.6            | Y6          |
| BZX584C20  | 18.8                 | 21.2 | 50                                            | 225  | 10                   | 45   | 12.4                               | 14.4 | 16.0  | 0.05                | 14              | Y7          |
| BZX584C22  | 20.8                 | 23.3 | 60                                            | 225  | 15                   | 55   | 14.4                               | 16.4 | 18.0  | 0.05                | 15.4            | Y8          |
| BZX584C24  | 22.8                 | 25.6 | 60                                            | 250  | 20                   | 55   | 16.4                               | 18.4 | 20.0  | 0.05                | 16.8            | Y9          |
|            | @I <sub>Z</sub> =2mA |      | @I <sub>Z</sub> =0.5mA                        |      | @I <sub>Z</sub> =2mA |      | @I <sub>Z</sub> =2mA               |      |       |                     |                 |             |
| BZX584C27  | 25.1                 | 28.9 | 65                                            | 300  | 25                   | 80   | 21.4                               | 23.4 | 25.3  | 0.05                | 18.9            | Y10         |
| BZX584C30  | 28.0                 | 32.0 | 70                                            | 300  | 30                   | 80   | 24.4                               | 26.6 | 29.4  | 0.05                | 21              | Y11         |
| BZX584C33  | 31.0                 | 35.0 | 75                                            | 325  | 35                   | 80   | 27.4                               | 29.7 | 33.4  | 0.05                | 23.1            | Y12         |
| BZX584C36  | 34.0                 | 38.0 | 80                                            | 350  | 35                   | 90   | 30.4                               | 33.0 | 37.4  | 0.05                | 25.2            | Y13         |
| BZX584C39  | 37.0                 | 41.0 | 80                                            | 350  | 40                   | 130  | 33.4                               | 36.4 | 41.2  | 0.05                | 27.3            | Y14         |
| BZX584C43  | 40.0                 | 46.0 | 85                                            | 375  | 45                   | 150  | 37.6                               | 41.2 | 46.6  | 0.05                | 30.1            | Y15         |
| BZX584C47  | 44.0                 | 50.0 | 85                                            | 375  | 50                   | 170  | 42.0                               | 46.1 | 51.8  | 0.05                | 32.9            | Y16         |
| BZX584C51  | 48.0                 | 54.0 | 95                                            | 400  | 60                   | 180  | 46.6                               | 51.3 | 57.2  | 0.05                | 35.7            | Y17         |
| BZX584C56  | 52.0                 | 60.0 | 110                                           | 425  | 75                   | 200  | 52.2                               | 58.4 | 63.8  | 0.05                | 39.2            | Y18         |
| BZX584C62  | 58.0                 | 66.0 | 130                                           | 450  | 90                   | 215  | 58.8                               | 63.9 | 71.6  | 0.05                | 43.4            | Y19         |
| BZX584C68  | 64.0                 | 72.0 | 160                                           | 475  | 110                  | 240  | 65. 6                              | 72.2 | 79. 8 | 0.05                | 47.6            | Y20         |
| BZX584C75  | 70.0                 | 79.0 | 200                                           | 500  | 150                  | 255  | 73. 4                              | 81.1 | 88. 6 | 0.05                | 52.5            | Y21         |

■ Typical Characteristic Curve 典型特性曲线

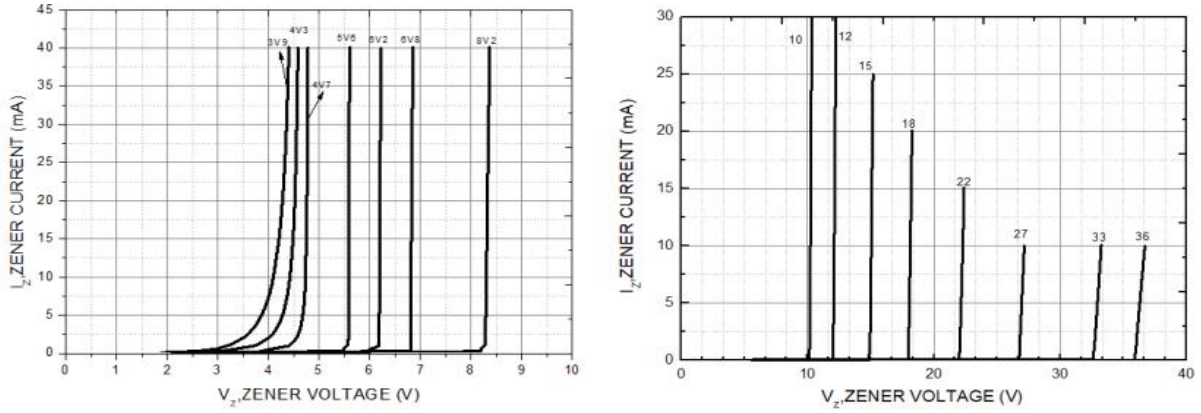


Figure 1: Zener Characteristics

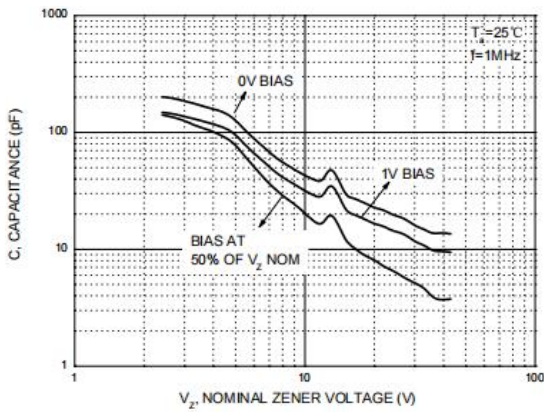


Figure 2: Capacitance Characteristics

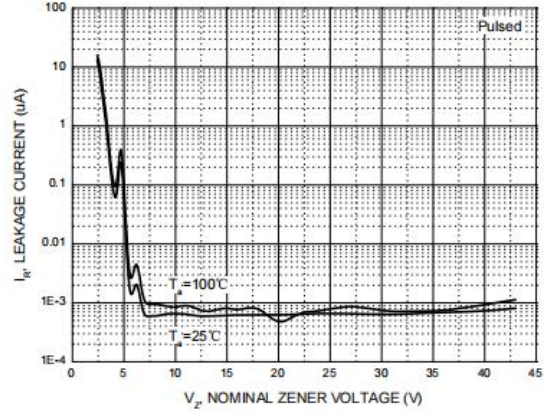


Figure 3: Leakage Current

■ Dimension 外形封装尺寸

