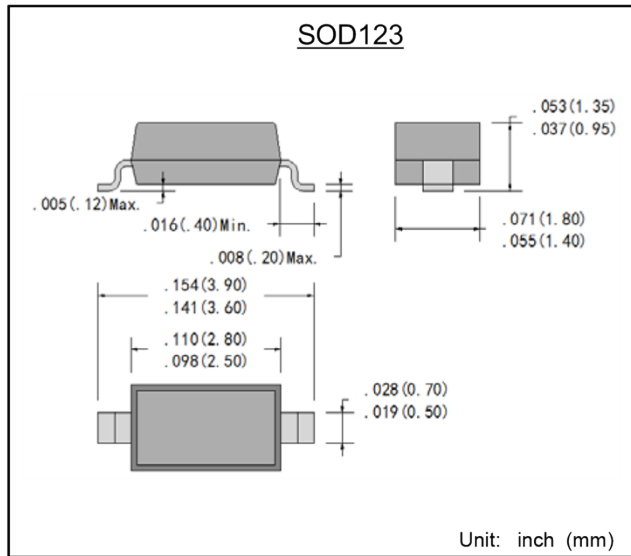


表面贴装稳压二极管  
功率 500 mW  
稳压电压范围 2.4 - 47 V

Surface Mount Zener Diode  
Power Dissipation 500 mW  
Zener Voltage Range 2.4 - 47 V



### 特征 Features

- 平面结构芯片 Planar die construction
- 标准稳压电压公差  $\pm 2\%$  Standard Zener voltage tolerance is  $\pm 2\%$
- 超小表面贴装器件 Ultra-small surface mount device
- 适合自动装配 Ideally suited for automated assembly processes
- 引线镀层和管体符合RoHS标准  
Lead plating and body according with RoHS standard

### 机械数据 Mechanical Data

- 封装: SOD123 塑料封装 Case: SOD123 Molded plastic
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

### 最大值和特性 TA = 25°C 除非另有规定。

#### Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| 参数<br>Parameter                                               | 符号<br>Symbols   | 数值           | 单位                          |
|---------------------------------------------------------------|-----------------|--------------|-----------------------------|
|                                                               |                 | Value        | Unit                        |
| 功率消耗<br>Power Dissipation                                     | $P_D$           | 500          | mW                          |
| 典型热阻<br>Type Thermal Resistance                               | $R_{\theta JA}$ | 330          | $^{\circ}\text{C}/\text{W}$ |
| 正向电压<br>Forward Voltage                                       | $V_{FM}$        | 0.9          | V                           |
| 工作结温和存储温度<br>Operating Junction and Storage Temperature Range | $T_J, T_{STG}$  | -55 --- +150 | $^{\circ}\text{C}$          |

备注 Note:

1) Valid Provided that Device Terminals are Kept at Ambient Temperature.

| 产品型号<br>Part No. | Marking | Zener Voltage Range |         |         |                       | $Z_{ZT}$          |                       | $Z_{ZK}$          |                       | $I_R(\mu\text{A})$ |                   |
|------------------|---------|---------------------|---------|---------|-----------------------|-------------------|-----------------------|-------------------|-----------------------|--------------------|-------------------|
|                  |         | Nom.(V)             | Min.(V) | Max.(V) | @ $I_{ZT}(\text{mA})$ | Max. ( $\Omega$ ) | @ $I_{ZT}(\text{mA})$ | Max. ( $\Omega$ ) | @ $I_{ZK}(\text{mA})$ | Max.               | @ $V_R(\text{V})$ |
| MM1Z2B4          | 2WX     | 2.4                 | 2.352   | 2.448   | 5.0                   | 100               | 5.0                   | 600               | 1.0                   | 50                 | 1.0               |
| MM1Z2B7          | 2W1     | 2.7                 | 2.646   | 2.754   | 5.0                   | 100               | 5.0                   | 600               | 1.0                   | 20                 | 1.0               |
| MM1Z3B0          | 2W2     | 3.0                 | 2.940   | 3.060   | 5.0                   | 95                | 5.0                   | 600               | 1.0                   | 10                 | 1.0               |
| MM1Z3B3          | 2W3     | 3.3                 | 3.234   | 3.366   | 5.0                   | 95                | 5.0                   | 600               | 1.0                   | 5                  | 1.0               |
| MM1Z3B6          | 2W4     | 3.6                 | 3.528   | 3.672   | 5.0                   | 90                | 5.0                   | 600               | 1.0                   | 5                  | 1.0               |
| MM1Z3B9          | 2W5     | 3.9                 | 3.822   | 3.978   | 5.0                   | 90                | 5.0                   | 600               | 1.0                   | 3                  | 1.0               |
| MM1Z4B3          | 2W6     | 4.3                 | 4.214   | 4.386   | 5.0                   | 90                | 5.0                   | 600               | 1.0                   | 3                  | 1.0               |
| MM1Z4B7          | 2W7     | 4.7                 | 4.606   | 4.794   | 5.0                   | 80                | 5.0                   | 500               | 1.0                   | 3                  | 2.0               |
| MM1Z5B1          | 2W8     | 5.1                 | 4.998   | 5.202   | 5.0                   | 60                | 5.0                   | 480               | 1.0                   | 2                  | 2.0               |
| MM1Z5B6          | 2W9     | 5.6                 | 5.488   | 5.712   | 5.0                   | 40                | 5.0                   | 400               | 1.0                   | 1                  | 2.0               |
| MM1Z6B2          | 2WA     | 6.2                 | 6.076   | 6.324   | 5.0                   | 10                | 5.0                   | 150               | 1.0                   | 3                  | 4.0               |
| MM1Z6B8          | 2WB     | 6.8                 | 6.664   | 6.936   | 5.0                   | 15                | 5.0                   | 80                | 1.0                   | 2                  | 4.0               |
| MM1Z7B5          | 2WC     | 7.5                 | 7.350   | 7.650   | 5.0                   | 15                | 5.0                   | 80                | 1.0                   | 1                  | 5.0               |
| MM1Z8B2          | 2WD     | 8.2                 | 8.036   | 8.364   | 5.0                   | 15                | 5.0                   | 80                | 1.0                   | 0.7                | 5.0               |
| MM1Z9B1          | 2WE     | 9.1                 | 8.918   | 9.282   | 5.0                   | 15                | 5.0                   | 100               | 1.0                   | 0.5                | 6.0               |

| 产品型号<br>Part No. | Marking | Zener Voltage Range |         |         |                       | Z <sub>ZT</sub> |                       | Z <sub>ZK</sub> |                       | I <sub>R</sub> (uA) |        |
|------------------|---------|---------------------|---------|---------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|---------------------|--------|
|                  |         | Nom.(V)             | Min.(V) | Max.(V) | @I <sub>ZT</sub> (mA) | Max. ( Ω )      | @I <sub>ZT</sub> (mA) | Max. ( Ω )      | @I <sub>ZK</sub> (mA) | Max.                | @VR(V) |
| MM1ZB10          | 2WF     | 10.0                | 9.800   | 10.200  | 5.0                   | 20              | 5.0                   | 150             | 1.0                   | 0.2                 | 7.0    |
| MM1ZB11          | 2WG     | 11.0                | 10.780  | 11.220  | 5.0                   | 20              | 5.0                   | 150             | 1.0                   | 0.1                 | 8.0    |
| MM1ZB12          | 2WH     | 12.0                | 11.760  | 12.240  | 5.0                   | 25              | 5.0                   | 150             | 1.0                   | 0.1                 | 8.0    |
| MM1ZB13          | 2WI     | 13.0                | 12.740  | 13.260  | 5.0                   | 30              | 5.0                   | 170             | 1.0                   | 0.1                 | 8.0    |
| MM1ZB15          | 2WJ     | 15.0                | 14.700  | 15.300  | 5.0                   | 30              | 5.0                   | 200             | 1.0                   | 0.1                 | 10.5   |
| MM1ZB16          | 2WK     | 16.0                | 15.680  | 16.320  | 5.0                   | 40              | 5.0                   | 200             | 1.0                   | 0.1                 | 11.2   |
| MM1ZB18          | 2WL     | 18.0                | 17.640  | 18.360  | 5.0                   | 45              | 5.0                   | 225             | 1.0                   | 0.1                 | 12.6   |
| MM1ZB20          | 2WM     | 20.0                | 19.600  | 20.400  | 5.0                   | 55              | 5.0                   | 225             | 1.0                   | 0.1                 | 14.0   |
| MM1ZB22          | 2WN     | 22.0                | 21.560  | 22.440  | 5.0                   | 55              | 5.0                   | 250             | 1.0                   | 0.1                 | 15.4   |
| MM1ZB24          | 2WO     | 24.0                | 23.520  | 24.480  | 5.0                   | 70              | 5.0                   | 250             | 1.0                   | 0.1                 | 16.8   |
| MM1ZB27          | 2WP     | 27.0                | 26.460  | 27.540  | 2.0                   | 80              | 2.0                   | 300             | 0.5                   | 0.1                 | 18.9   |
| MM1ZB30          | 2WQ     | 30.0                | 29.400  | 30.600  | 2.0                   | 80              | 2.0                   | 300             | 0.5                   | 0.1                 | 21.0   |
| MM1ZB33          | 2WR     | 33.0                | 32.340  | 33.660  | 2.0                   | 80              | 2.0                   | 325             | 0.5                   | 0.1                 | 23.1   |
| MM1ZB36          | 2WS     | 36.0                | 35.280  | 36.720  | 2.0                   | 90              | 2.0                   | 350             | 0.5                   | 0.1                 | 25.2   |
| MM1ZB39          | 2WT     | 39.0                | 38.220  | 39.780  | 2.0                   | 130             | 2.0                   | 350             | 0.5                   | 0.1                 | 27.3   |
| MM1ZB43          | 2WU     | 43.0                | 42.140  | 43.860  | 2.0                   | 100             | 2.0                   | 700             | 1.0                   | 0.1                 | 32.0   |
| MM1ZB47          | 2WV     | 47.0                | 46.060  | 47.940  | 2.0                   | 100             | 2.0                   | 750             | 1.0                   | 0.1                 | 35.0   |