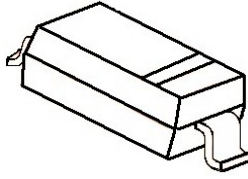
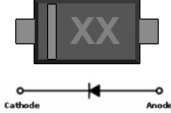


### SOD-123



### Marking:



### 特征 Features

- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 高稳定性和可靠性。High Stability and High Reliability

### 机械数据 Mechanical Data

- 封装: SOD-123 封装 SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25°C 除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

| 参数 Parameters                              | 符号 Symbol | 数值 Value          | 单位 Unit |
|--------------------------------------------|-----------|-------------------|---------|
| 功率消耗 Power Dissipation                     | Pd        | 500 <sup>1)</sup> | mW      |
| 正向压降 Forward Voltage @IF=10mA              | Vf        | 0.9 <sup>2)</sup> | V       |
| 热阻 Thermal Resistance, Junction-to-Ambient | RθJA      | 340 <sup>3)</sup> | °C/W    |
| 热阻 Thermal Resistance, Junction-to-Lead    | RθJL      | 150 <sup>3)</sup> | °C/W    |
| 存储温度 Storage temperature range             | Ts        | -65~+150          | °C      |

1) Device mounted on ceramic PCB: 7.6mm x 9.4mm x 0.87mm with pad areas 25mm<sup>2</sup>

2) Short duration test pulse used to minimize self-heating effect

3) Thermal Resistance measurement obtained via infrared Scan Method.

4) f=1KHz

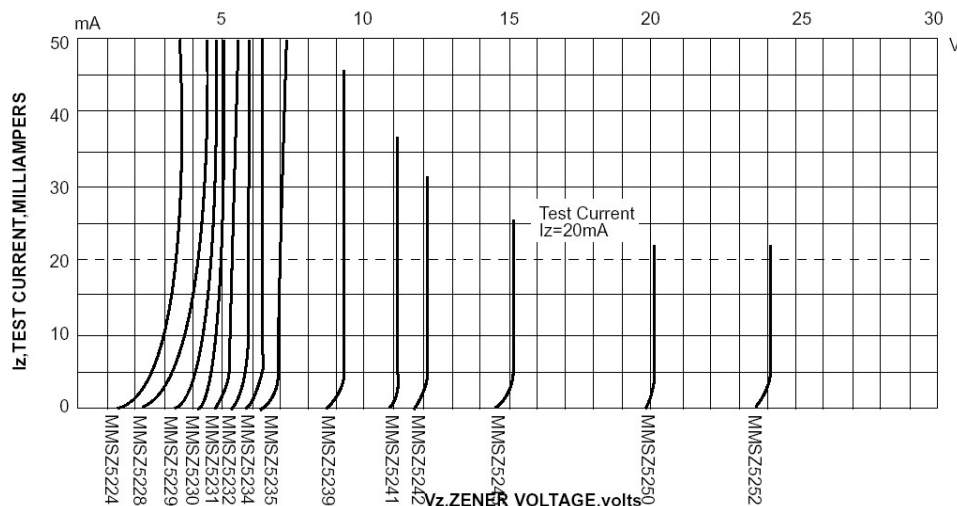
电特性 (TA = 25°C 除非另有规定)

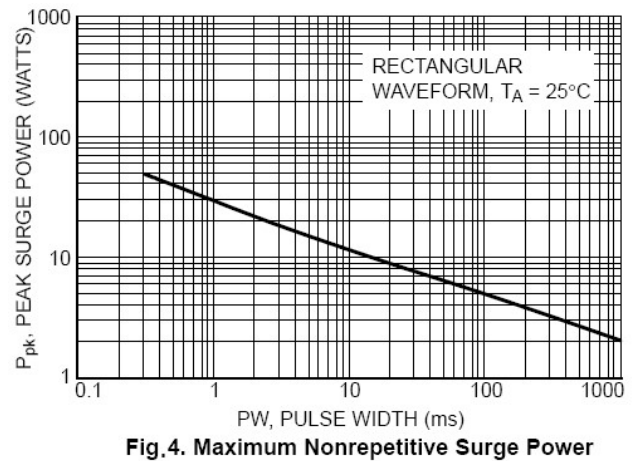
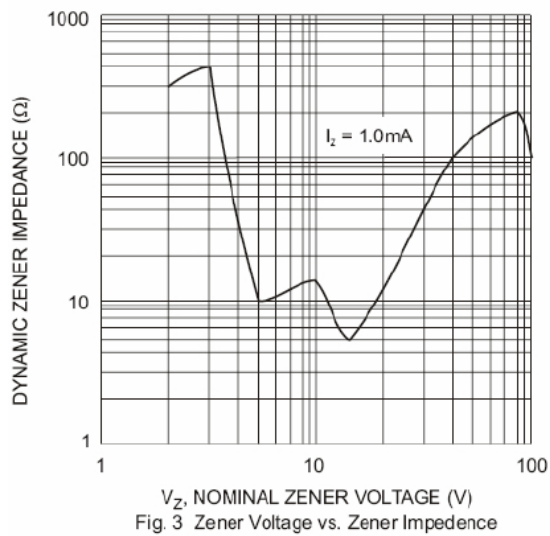
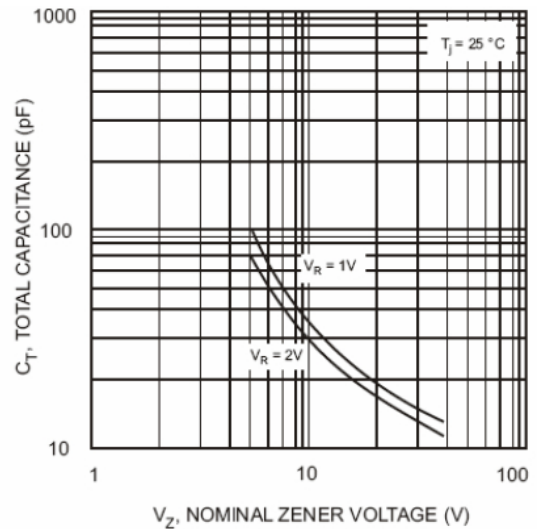
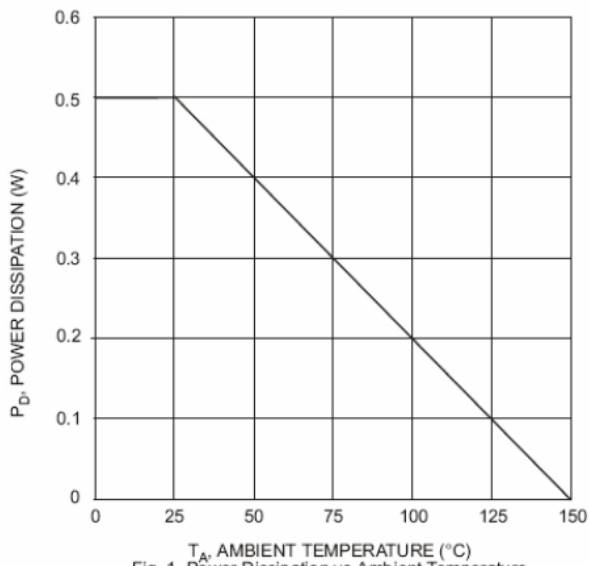
**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

| 型号        | 印字<br>(代码) | Vz1(@Izt) |      |     | Zzt@Izt | Zzk  |      | IR  |     |
|-----------|------------|-----------|------|-----|---------|------|------|-----|-----|
|           |            | Min       | Max  | Izt | Max     | Max  | Izk  | Max | VR  |
|           |            | (V)       | (V)  | mA  | Ω       | Ω    | mA   | uA  | V   |
| MMSZ5221B | C1         | 2.28      | 2.52 | 20  | 30      | 1200 | 0.25 | 100 | 1.0 |
| MMSZ5222B | C2         | 2.38      | 2.63 | 20  | 30      | 1250 | 0.25 | 100 | 1.0 |
| MMSZ5223B | C3         | 2.57      | 2.84 | 20  | 30      | 1300 | 0.25 | 75  | 1.0 |
| MMSZ5224B | C4         | 2.66      | 2.94 | 20  | 30      | 1400 | 0.25 | 75  | 1.0 |
| MMSZ5225B | C5         | 2.85      | 3.15 | 20  | 30      | 1600 | 0.25 | 50  | 1.0 |
| MMSZ5226B | G1         | 3.14      | 3.47 | 20  | 28      | 1600 | 0.25 | 25  | 1.0 |
| MMSZ5227B | G2         | 3.42      | 3.78 | 20  | 24      | 1700 | 0.25 | 15  | 1.0 |
| MMSZ5228B | G3         | 3.71      | 4.10 | 20  | 23      | 1900 | 0.25 | 10  | 1.0 |
| MMSZ5229B | G4         | 4.09      | 4.52 | 20  | 22      | 2000 | 0.25 | 5.0 | 1.0 |
| MMSZ5230B | G5         | 4.47      | 4.94 | 20  | 19      | 1900 | 0.25 | 5.0 | 2.0 |
| MMSZ5231B | E1         | 4.85      | 5.36 | 20  | 17      | 1600 | 0.25 | 5.0 | 2.0 |
| MMSZ5232B | E2         | 5.32      | 5.88 | 20  | 11      | 1600 | 0.25 | 5.0 | 3.0 |
| MMSZ5233B | E3         | 5.70      | 6.30 | 20  | 7       | 1600 | 0.25 | 5.0 | 3.5 |
| MMSZ5234B | E4         | 5.89      | 6.51 | 20  | 7       | 1000 | 0.25 | 5.0 | 4.0 |
| MMSZ5235B | E5         | 6.46      | 7.14 | 20  | 5       | 750  | 0.25 | 3   | 5.0 |
| MMSZ5236B | F1         | 7.13      | 7.88 | 20  | 6       | 500  | 0.25 | 3   | 6.0 |
| MMSZ5237B | F2         | 7.79      | 8.61 | 20  | 8       | 500  | 0.25 | 3   | 6.5 |
| MMSZ5238B | F3         | 8.27      | 9.14 | 20  | 8       | 600  | 0.25 | 3   | 6.5 |

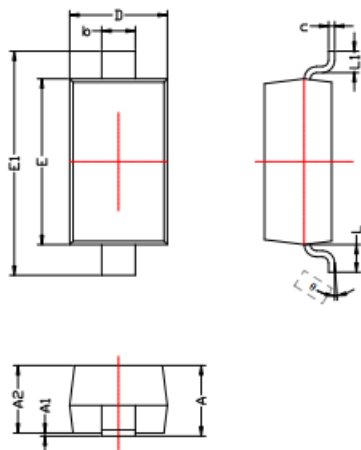
| 型号        | 印字<br>(代码) | Vz1(@Izt) |       |     | Zzt@Izt  | Zzk      |      | IR      |     |
|-----------|------------|-----------|-------|-----|----------|----------|------|---------|-----|
|           |            | Min       | Max   | Izt | Max      | Max      | Izk  | Max     | VR  |
|           |            | (V)       | (V)   | mA  | $\Omega$ | $\Omega$ | mA   | $\mu$ A | V   |
| MMSZ5239B | F4         | 8.65      | 9.56  | 20  | 10       | 600      | 0.25 | 3       | 7.0 |
| MMSZ5240B | F5         | 9.50      | 10.50 | 20  | 17       | 600      | 0.25 | 3       | 8.0 |
| MMSZ5241B | H1         | 10.45     | 11.55 | 20  | 22       | 600      | 0.25 | 2.0     | 8.4 |
| MMSZ5242B | H2         | 11.40     | 12.60 | 20  | 30       | 600      | 0.25 | 1.0     | 9.1 |
| MMSZ5243B | H3         | 12.35     | 13.65 | 9.5 | 13       | 600      | 0.25 | 0.5     | 9.9 |
| MMSZ5244B | H4         | 13.30     | 14.70 | 9.0 | 15       | 600      | 0.25 | 0.1     | 10  |
| MMSZ5245B | H5         | 14.25     | 15.75 | 8.5 | 16       | 600      | 0.25 | 0.1     | 11  |
| MMSZ5246B | J1         | 15.20     | 16.80 | 7.8 | 17       | 600      | 0.25 | 0.1     | 12  |
| MMSZ5247B | J2         | 16.15     | 17.85 | 7.5 | 19       | 600      | 0.25 | 0.1     | 13  |
| MMSZ5248B | J3         | 17.10     | 18.90 | 7.0 | 21       | 600      | 0.25 | 0.1     | 14  |
| MMSZ5249B | J4         | 18.05     | 19.95 | 6.6 | 23       | 600      | 0.25 | 0.1     | 14  |
| MMSZ5250B | J5         | 19.00     | 21.00 | 6.2 | 25       | 600      | 0.25 | 0.1     | 15  |
| MMSZ5251B | K1         | 20.90     | 23.10 | 5.6 | 29       | 600      | 0.25 | 0.1     | 17  |
| MMSZ5252B | K2         | 22.80     | 25.20 | 5.2 | 33       | 600      | 0.25 | 0.1     | 18  |
| MMSZ5253B | K3         | 23.75     | 26.25 | 5.0 | 35       | 600      | 0.25 | 0.1     | 19  |
| MMSZ5254B | K4         | 25.65     | 28.35 | 5.0 | 41       | 600      | 0.25 | 0.1     | 21  |
| MMSZ5255B | K5         | 26.60     | 29.40 | 4.5 | 44       | 600      | 0.25 | 0.1     | 21  |
| MMSZ5256B | M1         | 28.50     | 31.50 | 4.2 | 49       | 600      | 0.25 | 0.1     | 23  |
| MMSZ5257B | M2         | 31.35     | 34.65 | 3.8 | 58       | 700      | 0.25 | 0.1     | 25  |
| MMSZ5258B | M3         | 34.20     | 37.80 | 3.4 | 70       | 700      | 0.25 | 0.1     | 27  |
| MMSZ5259B | M4         | 37.05     | 40.95 | 3.2 | 80       | 800      | 0.25 | 0.1     | 30  |
| MMSZ5260B | M5         | 40.85     | 45.15 | 3.0 | 93       | 900      | 0.25 | 0.1     | 33  |
| MMSZ5261B | N1         | 44.65     | 49.35 | 2.7 | 105      | 1000     | 0.25 | 0.1     | 36  |
| MMSZ5262B | N2         | 48.45     | 53.55 | 2.5 | 125      | 1100     | 0.25 | 0.1     | 39  |
| MMSZ5263B | N3         | 53.20     | 58.80 | 2.2 | 150      | 1300     | 0.25 | 0.1     | 43  |
| MMSZ5264B | N4         | 57.00     | 63.00 | 2.1 | 170      | 1400     | 0.25 | 0.1     | 46  |
| MMSZ5265B | N5         | 58.90     | 65.10 | 2.0 | 185      | 1400     | 0.25 | 0.1     | 47  |
| MMSZ5266B | P1         | 64.60     | 71.40 | 1.8 | 230      | 1600     | 0.25 | 0.1     | 52  |
| MMSZ5267B | P2         | 71.25     | 78.75 | 1.7 | 270      | 1700     | 0.25 | 0.1     | 56  |

Breakdown characteristics





### SOD-123 PACKAGE OUTLINE Plastic surface mounted package



| SYMBOL | DIMENSIONS |       |
|--------|------------|-------|
|        | MIN.       | MAX.  |
| A      | 1.050      | 1.250 |
| A1     | 0.000      | 0.100 |
| A2     | 1.050      | 1.150 |
| b      | 0.450      | 0.650 |
| c      | 0.080      | 0.150 |
| D      | 1.500      | 1.700 |
| E      | 2.600      | 2.800 |
| E1     | 3.550      | 3.850 |
| L      | 0.500REF   |       |
| L1     | 0.250      | 0.450 |
| θ      | 0°         | 8°    |

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