

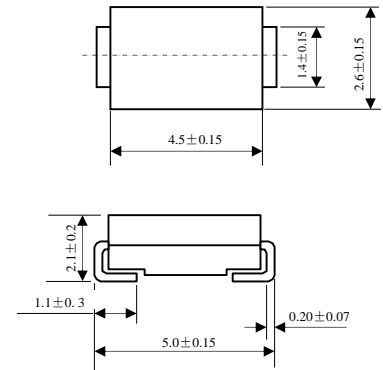
### 特性 : FEATURES :

- ◆ 小电流下的齐纳阻抗低  
ZENER impedance at low current is small
- ◆ 高可靠性  
High reliability
- ◆ 耐焊接热 260°C / 10S  
High temperature soldering guaranteed: 260°C / 10S at terminals

### 机械性能: MECHANICAL DATA :

- ◆ 封装: 模塑封装  
Case: Molded plastic
- ◆ 塑封材料: 采用 UL94V-0 认可的阻燃环氧料  
Epoxy: UL94V-0 rate flame retardant
- ◆ 端子: 端子镀锡, 可焊性符合 MIL-STD-750, 方法 2025  
Terminals: Solder plated solderable per MIL-STD-750, method 2025
- ◆ 极性: 色环表示阴极  
Polarity: Color band denotes cathode
- ◆ 安装位置: 任意  
Mounting position: Any

### SMA / DO-214AC



1 w 齐纳 (稳压) 二极管  
1.0 WATT SURFACE MOUNT SILICON ZENER DIODES  
尺寸单位: inch (mm)  
Dimensions in inches and (millimeters)

## 最大额定值及电气特性 MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

测量环境温度为 25°C, 除非另有规定。单相半波, 50HZ, 阻性或感性负载。对于容性负载, 电流降额 20%  
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load.  
For capacitive load, derate current by 20%

| 参数名称<br>PARAMETERS   | 符号<br>SYMBOL       | 额定值<br>VALUE | 单位<br>UNITS |
|--|--------------------|--------------|-------------|
| 齐纳电流 ZENER Current   | I <sub>Z</sub> MAX | 见表 See Table | mA          |
| 耗散功率 (注释 1) Power Dissipation (Note1)                                | P <sub>t</sub>     | 1            | W           |
| 热阻抗 (结至周围环境, 注释 1) Thermal Resistances ( Junction to Ambient ,Note1) | R <sub>θ(ja)</sub> | 32           | °C/W        |
| 使用温度范围 Operating Temperature Range                                   | T <sub>J</sub>     | -50~+150     | °C          |
| 储存温度范围 Storage Temperature Range                                     | T <sub>STG</sub>   | -50~+175     | °C          |

### 注释 :

1. 在引线末端安装 5×5mm 散热铜片。

### NOTES :

1. Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area.

电特性 ( 测量环境温度为25℃, 除非另有规定 )  
ELECTRICAL CHARACTERISTICS ( at T<sub>A</sub>=25 °C unless otherwise noted )

| 型号<br>TYPE | 齐纳电压<br>ZENER Voltage         |                 | 最大齐纳阻抗<br>Max ZENER Impedance   |                                 |                 | 最大反向漏电流<br>Maximum Reverse Leakage Current |                | 最大直流齐纳电流<br>Maximum DC ZENER Current |
|------------|-------------------------------|-----------------|---------------------------------|---------------------------------|-----------------|--|----------------|--------------------------------------|
|            | V <sub>Z@I<sub>ZT</sub></sub> | I <sub>ZT</sub> | Z <sub>ZT @I<sub>ZT</sub></sub> | Z <sub>ZK @I<sub>ZK</sub></sub> | I <sub>ZK</sub> | I <sub>R@V<sub>R</sub></sub>               | V <sub>R</sub> | I <sub>ZM @50°C</sub>                |
|            | V                             | mA              | Ω                               | Ω                               | mA              | μA   | V              | mA                                   |
| SMA4728    | 3.3                           | 76              | 10                              | 400                             | 1.0             | 100  | 1              | 276                                  |
| SMA4729    | 3.6                           | 69              | 10                              | 400                             | 1.0             | 100  | 1              | 252                                  |
| SMA4730    | 3.9                           | 64              | 9                               | 400                             | 1.0             | 50   | 1              | 234                                  |
| SMA4731    | 4.3                           | 58              | 9                               | 400                             | 1.0             | 10   | 1              | 217                                  |
| SMA4732    | 4.7                           | 53              | 8                               | 500                             | 1.0             | 10   | 1              | 193                                  |
| SMA4733    | 5.1                           | 49              | 7                               | 550                             | 1.0             | 10   | 1              | 178                                  |
| SMA4734    | 5.6                           | 45              | 5                               | 600                             | 1.0             | 10   | 2              | 162                                  |
| SMA4735    | 6.2                           | 41              | 2                               | 700                             | 1.0             | 10   | 3              | 146                                  |
| SMA4736    | 6.8                           | 37              | 3.5                             | 700                             | 1.0             | 10   | 4              | 133                                  |
| SMA4737    | 7.5                           | 34              | 4.0                             | 700                             | 0.5             | 10   | 5              | 121                                  |
| SMA4738    | 8.2                           | 31              | 4.5                             | 700                             | 0.5             | 10   | 6              | 110                                  |
| SMA4739    | 9.1                           | 28              | 5.0                             | 700                             | 0.25            | 10   | 7              | 100                                  |
| SMA4740    | 10                            | 25              | 7                               | 700                             | 0.25            | 10   | 7.6            | 91                                   |
| SMA4741    | 11                            | 23              | 8                               | 700                             | 0.25            | 5  | 8.4            | 83                                   |
| SMA4742    | 12                            | 21              | 9                               | 700                             | 0.25            | 5  | 9.1            | 76                                   |
| SMA4743    | 13                            | 19              | 10                              | 700                             | 0.25            | 5  | 9.9            | 69                                   |
| SMA4744    | 15                            | 17              | 14                              | 700                             | 0.25            | 5  | 11.4           | 61                                   |
| SMA4745    | 16                            | 15.5            | 16                              | 700                             | 0.25            | 5  | 12.2           | 57                                   |
| SMA4746    | 18                            | 14              | 20                              | 750                             | 0.25            | 5  | 13.7           | 50                                   |
| SMA4747    | 20                            | 12.5            | 22                              | 750                             | 0.25            | 5  | 15.2           | 45                                   |
| SMA4748    | 22                            | 11.5            | 23                              | 750                             | 0.25            | 5  | 16.7           | 41                                   |
| SMA4749    | 24                            | 10.5            | 25                              | 750                             | 0.25            | 5  | 18.2           | 38                                   |
| SMA4750    | 27                            | 9.5             | 35                              | 750                             | 0.25            | 5  | 20.6           | 34                                   |
| SMA4751    | 30                            | 8.5             | 40                              | 1000                            | 0.25            | 5  | 22.8           | 30                                   |
| SMA4752    | 33                            | 7.5             | 45                              | 1000                            | 0.25            | 5  | 25.1           | 27                                   |
| SMA4753    | 36                            | 7.0             | 50                              | 1000                            | 0.25            | 5  | 27.4           | 25                                   |
| SMA4754    | 39                            | 6.5             | 60                              | 1000                            | 0.25            | 5  | 29.7           | 23                                   |
| SMA4755    | 43                            | 6.0             | 70                              | 1500                            | 0.25            | 5  | 32.7           | 22                                   |
| SMA4756    | 47                            | 5.5             | 80                              | 1500                            | 0.25            | 5  | 35.8           | 19                                   |
| SMA4757    | 51                            | 5.0             | 95                              | 1500                            | 0.25            | 5  | 38.8           | 18                                   |
| SMA4758    | 56                            | 4.5             | 110                             | 2000                            | 0.25            | 5  | 42.6           | 16                                   |
| SMA4759    | 62                            | 4.0             | 125                             | 2000                            | 0.25            | 5  | 47.1           | 14                                   |
| SMA4760    | 68                            | 3.7             | 150                             | 2000                            | 0.25            | 5  | 51.7           | 13                                   |
| SMA4761    | 75                            | 3.3             | 175                             | 2000                            | 0.25            | 5  | 56.0           | 12                                   |
| SMA4762    | 82                            | 3.0             | 200                             | 3000                            | 0.25            | 5  | 62.2           | 11                                   |
| SMA4763    | 91                            | 2.8             | 250                             | 3000                            | 0.25            | 5  | 69.2           | 10                                   |
| SMA4764    | 100                           | 2.5             | 350                             | 3000                            | 0.25            | 5  | 76.0           | 9                                    |
| SMA4765    | 110                           | 2.3             | 450                             | 4000                            | 0.25            | 5  | 83.6           | 7.2                                  |
| SMA4766    | 120                           | 2.0             | 550                             | 4500                            | 0.25            | 5  | 91.2           | 7.0                                  |
| SMA4767    | 130                           | 1.9             | 700                             | 5000                            | 0.25            | 5  | 98.8           | 6.0                                  |
| SMA4768    | 150                           | 1.7             | 1000                            | 6000                            | 0.25            | 5  | 114.0          | 5.5                                  |
| SMA4769    | 160                           | 1.6             | 1100                            | 6500                            | 0.25            | 5  | 121.6          | 5.2                                  |
| SMA4770    | 180                           | 1.4             | 1200                            | 7000                            | 0.25            | 5  | 136.8          | 4.6                                  |
| SMA4771    | 200                           | 1.2             | 1500                            | 8000                            | 0.25            | 5  | 152.0          | 4.0                                  |

注 释 :

1. V<sub>F</sub> = 1.2 V max.@ I<sub>F</sub>=200mA
2. 标准型的齐纳电压值偏差为 20% ; 附加下标 "A" 的特选型, 其偏差为 5%, 附加下标 "B" 的特选型, 其偏差为 10% 。

Note :

1. V<sub>F</sub>=1.2V max. @ I<sub>F</sub>=200mA
2. Standard tolerance on nominal ZENER voltage is ±20%, A±10% tolerance may be obtained by adding the suffix "A" to the number. B±5% tolerance may be obtained by adding the suffix "B" to the number