



# 1SMA5921A-1SMA5956A

## ZENER DIODES

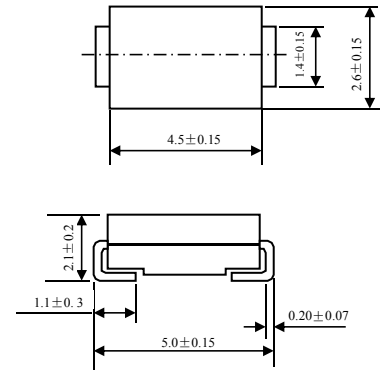
### 特性 : FEATURES :

- ◆ 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



1.5 w 齐纳 (稳压) 二极管  
1.5 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 PARAMETERS	符号 SYMBOL	额定值 VALUE	单位 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>	1.5	W
热阻抗 (结至周围环境, 注释 1) Thermal Resistances ( Junction to Ambient ,Note1)	R <sub>θ(ja)</sub>	28	°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.



# 1SMA5921A-1SMA5956A

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 TYPE	齐纳电压 ZENER Voltage		最大齐纳阻抗 Max ZENER Impedance			最大反向漏电流 Maximum Reverse Leakage Current		最大直流 齐纳电流 Maximum DC ZENER Current
	V <sub>Z@I<sub>ZT</sub></sub>	I <sub>ZT</sub>	Z <sub>KT @I<sub>ZT</sub></sub>	Z <sub>JK @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
1SMA5921A	6.8	55.1	2.5	200	1.0	5.0	5.2	220
1SMA5922A	7.5	50.0	3.0	400	0.5	5.0	6.8	200
1SMA5923A	8.2	45.7	3.5	400	0.5	5.0	6.5	182
1SMA5924A	9.1	41.2	4.0	500	0.5	5.0	7.0	164
1SMA5925A	10	37.5	4.5	500	0.25	5.0	8.0	150
1SMA5926A	11	34.1	5.5	550	0.25	1.0	8.4	136
1SMA5927A	12	31.2	6.5	550	0.25	1.0	9.1	125
1SMA5928A	13	28.8	7.0	550	0.25	1.0	9.9	115
1SMA5929A	15	25.0	9.0	600	0.25	1.0	11.4	100
1SMA5930A	16	23.4	10.0	600	0.25	1.0	12.2	93
1SMA5931A	18	20.8	12.0	650	0.25	1.0	13.7	83
1SMA5932A	20	18.7	14.0	650	0.25	1.0	15.2	75
1SMA5933A	22	17.0	17.5	650	0.25	1.0	16.7	68
1SMA5934A	24	15.6	19	700	0.25	1.0	18.2	62
1SMA5935A	27	13.9	23	700	0.25	1.0	20.6	55
1SMA5936A	30	12.5	26	750	0.25	1.0	22.8	50
1SMA5937A	33	11.4	33	800	0.25	1.0	25.1	45
1SMA5938A	36	10.4	38	850	0.25	1.0	27.4	41
1SMA5939A	39	9.6	45	900	0.25	1.0	29.7	38
1SMA5940A	43	8.7	53	950	0.25	1.0	32.7	34
1SMA5941A	47	8.0	67	1000	0.25	1.0	35.8	31
1SMA5942A	51	7.3	70	1100	0.25	1.0	38.8	29
1SMA5943A	56	6.7	86	1300	0.25	1.0	42.6	26
1SMA5944A	62	6.0	100	1500	0.25	1.0	47.1	24
1SMA5945A	68	5.5	120	1700	0.25	1.0	51.7	22
1SMA5946A	75	5.0	140	2000	0.25	1.0	56.0	20
1SMA5947A	82	4.6	160	2500	0.25	1.0	62.2	18
1SMA5948A	91	4.1	200	3000	0.25	1.0	69.2	16
1SMA5949A	100	3.7	250	3100	0.25	1.0	76.0	15
1SMA5950A	110	3.4	300	4000	0.25	1.0	83.6	13
1SMA5951A	120	3.1	380	4500	0.25	1.0	91.2	12
1SMA5952A	130	2.9	450	5000	0.25	1.0	98.8	11
1SMA5953A	150	2.5	600	6000	0.25	1.0	114.0	10
1SMA5954A	160	2.3	700	6500	0.25	1.0	121.6	9
1SMA5955A	180	2.1	900	7000	0.25	1.0	136.8	8
1SMA5956A	200	1.9	1200	8000	0.25	1.0	152.0	7

注 释 :

- VF = 1.5 V max.@ IF=200mA
- 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 10%,附加下标 “B” 的特选型, 其偏差为 5% 。

Note :

- VF=1.5V max. @ IF=200mA
- 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