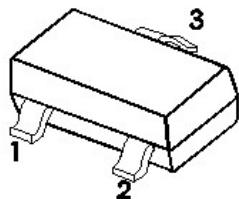


### SOT-23 Plastic-Encapsulate Switching Diode

SOT-23



#### 特征 Features

- 开关速度小于 50nS; Fast Switching Device (TRR <50 nS)
- 最大功率耗散 350mW; Power Dissipation of 350mW
- 高稳定性和可靠性。High Stability and High Reliability
- 反向漏电流小。Low reverse leakage

#### 机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

BAV23A	BAV23C	BAV23S
<b>MARKING: KT7</b>	<b>MARKING: KT6</b>	<b>MARKING: KL31</b>

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.)

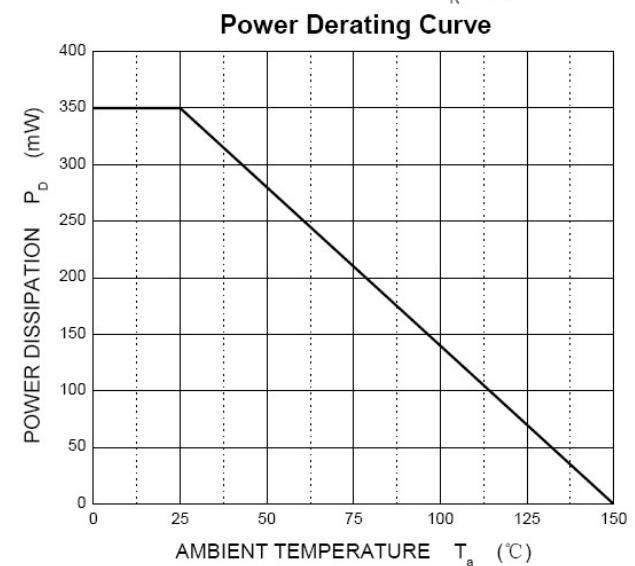
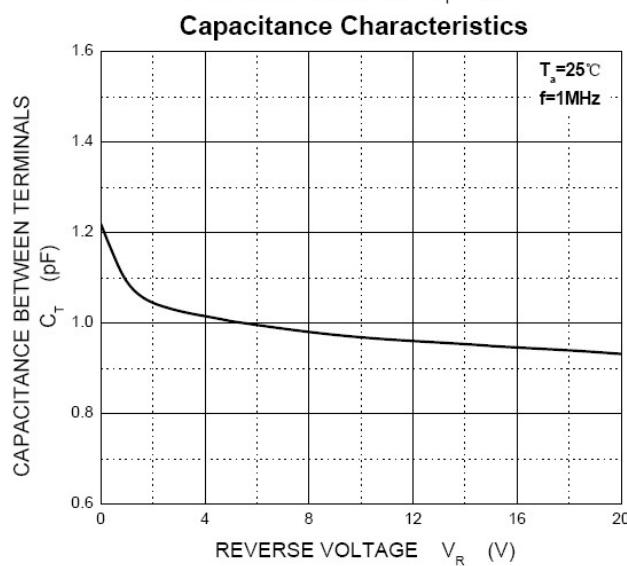
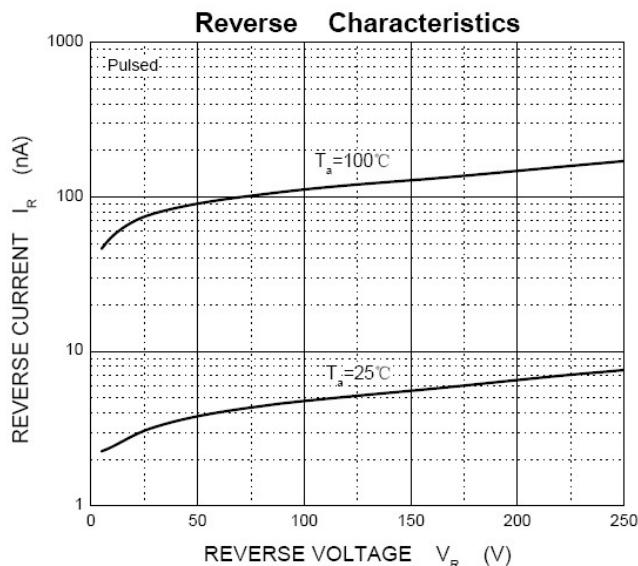
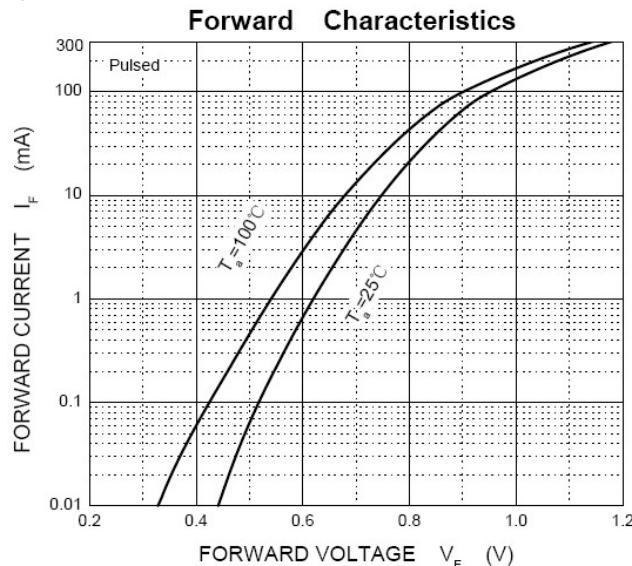
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	VR	250	V
反向峰值电压 Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	175	V
功率消耗 Power Dissipation	P <sub>d</sub>	350	mW
平均整流输出电流 Average Rectified Output Current	I <sub>o</sub>	225	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @t=8.3ms; TA=25°C	I <sub>FSM</sub>	1.7	A
工作结温 Operating junction temperature	T <sub>j</sub>	150	°C
存储温度 Storage temperature range	T <sub>s</sub>	-55~+150	°C
热阻抗 Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	357	°C/W

Valid provided that electrodes are kept at ambient temperature.

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

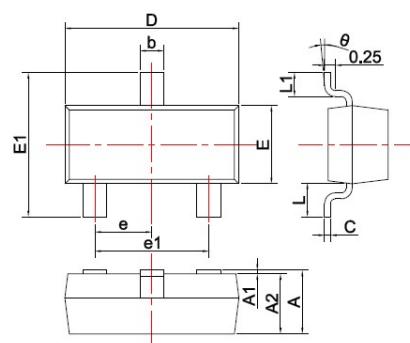
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V <sub>(BR)</sub>	反向电压 Reverse Voltage	I <sub>R</sub> =100uA	250		V
I <sub>R</sub>	反向漏电电流 Reverse Leakage Current	V <sub>R</sub> =200V	---	0.1	uA
V <sub>F</sub>	正向电压 Forward Voltage	I <sub>F</sub> =100mA	---	1.00	V
		I <sub>F</sub> =200mA	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> =30mA	---	50	nS
		R <sub>L</sub> =100Ω			
		I <sub>RR</sub> =0.1 X I <sub>R</sub>			
CT	结电容 Capacitance	V <sub>R</sub> =0V, f=1MHZ	---	5	pF

### Typical Characteristics



### SOT-23 PACKAGE OUTLINE

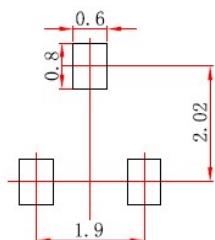
Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
theta	0°	8°

Unit: mm

焊盘设计参考 Precautions: PCB Design(Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs)



#### Note:

1. Controlling dimension: In millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.