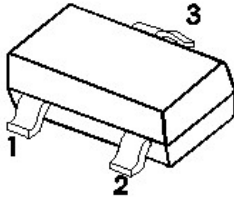


SOT-23

SOT-23 Plastic-Encapsulate Switching Diode

特征 Features

- 开关速度小于 50nS; Fast Switching Device (TRR <50nS)
- 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

BAS23A	BAS23C	BAS23S
MARKING: KT7	MARKING: KT6	MARKING: KL31

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

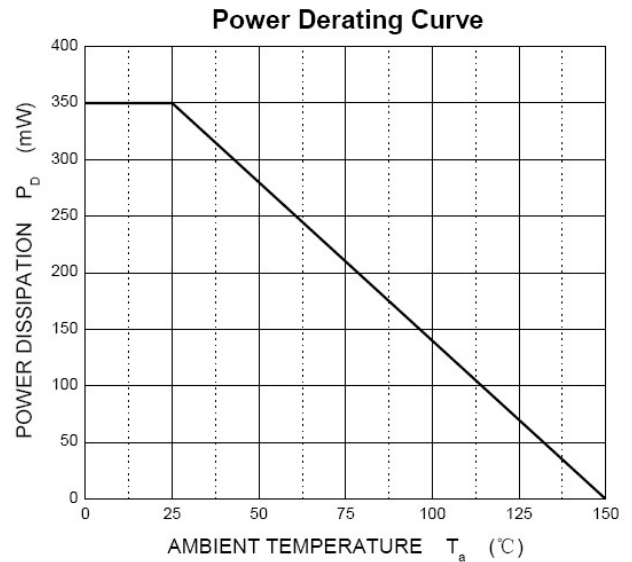
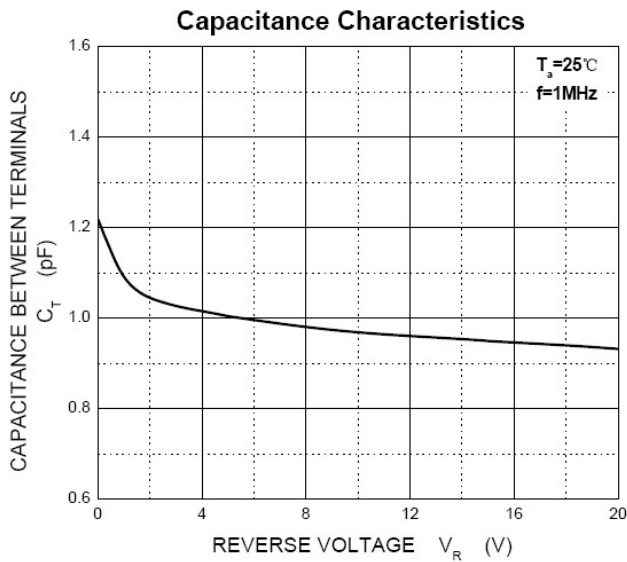
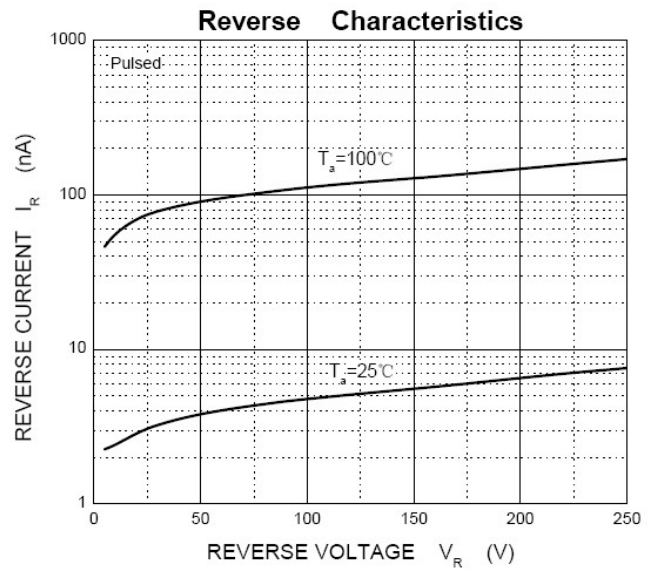
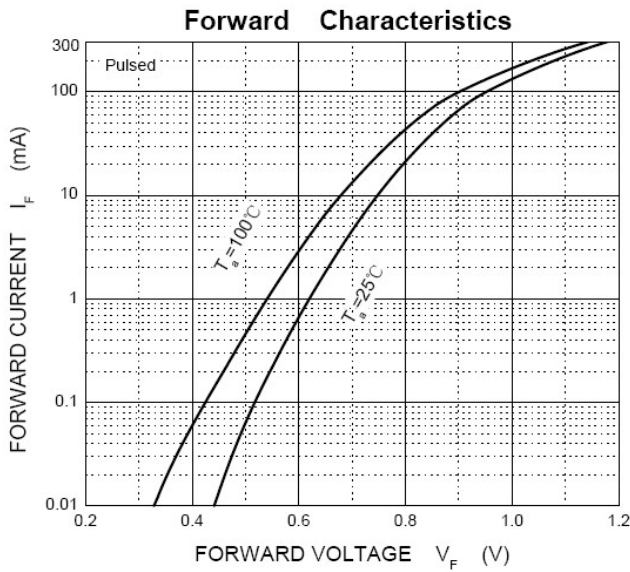
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V _R	200	V
反向峰值电压 Maximum Repetitive Reverse Voltage	V _{RRM}	250	V
功率消耗 Power Dissipation	P _d	350	mW
正向电流 Forward Current	I _{F(AV)}	400	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @t=8.3ms; TA=25℃	I _{FSM}	1.7	A
工作结温 Operating junction temperature	T _j	150	℃
存储温度 Storage temperature range	T _s	-55-+150	℃
热阻抗 Thermal Resistance from Junction to Ambient	R _{θJA}	357	℃/W

Valid provided that electrodes are kept at ambient temperature.

电特性 Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

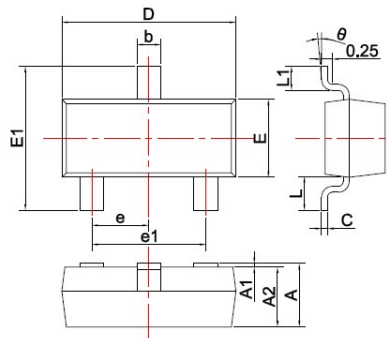
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V(BR)	反向电压 Reverse Voltage	IR=100uA	250		V
IR	反向漏电流 Reverse Leakage Current	VR=250V	---	0.1	uA
VF	正向电压 Forward Voltage	IF=100mA	---	1.00	V
		IF=200mA	---	1.25	
TRR	反向恢复时间 Reverse Recovery Time	IF= IR=30mA	---	50	nS
		RL=100Ω	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

Typical Characteristics



SOT-23 PACKAGE OUTLINE

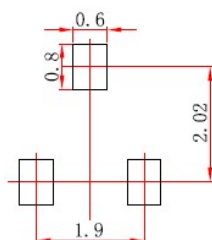
Plastic surface mounted package



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:
- Controlling dimension: in millimeters.
 - General tolerance: $\pm 0.05\text{mm}$.
 - The pad layout is for reference purposes only.