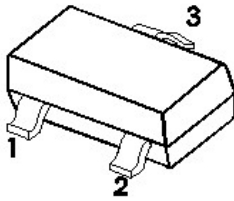


SOT-23

**SOT-23 贴片塑封二极管**  
**SOT-23 Plastic-Encapsulate Switching Diode**

**特征 Features**



- 开关速度小于 50nS; Fast Switching Device (TRR <50 nS)
- 最大功率耗散 225mW; Power Dissipation of 225mW
- 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

BAS21	BAS21A	BAS21C	BAS21S
<b>MARKING: JS</b>	<b>MARKING: JS2</b>	<b>MARKING: JS3</b>	<b>MARKING: JS4</b>

**极限值和温度特性**( $T_A = 25^\circ\text{C}$  除非另有规定)

**Maximum Ratings & Thermal Characteristics** (Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified.)

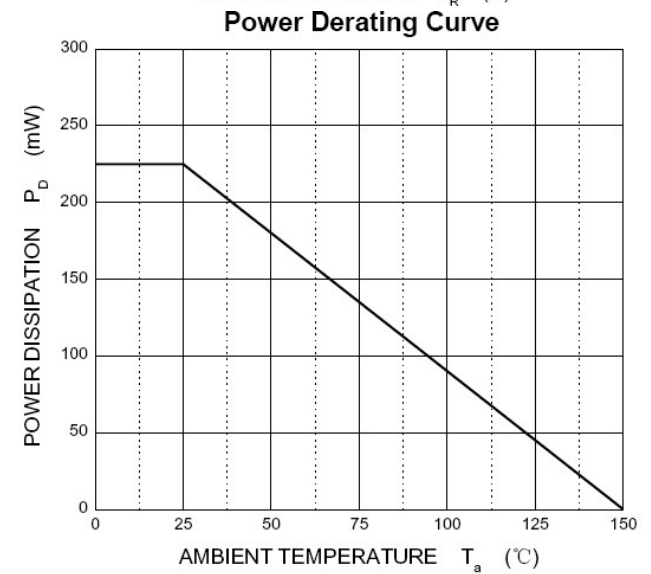
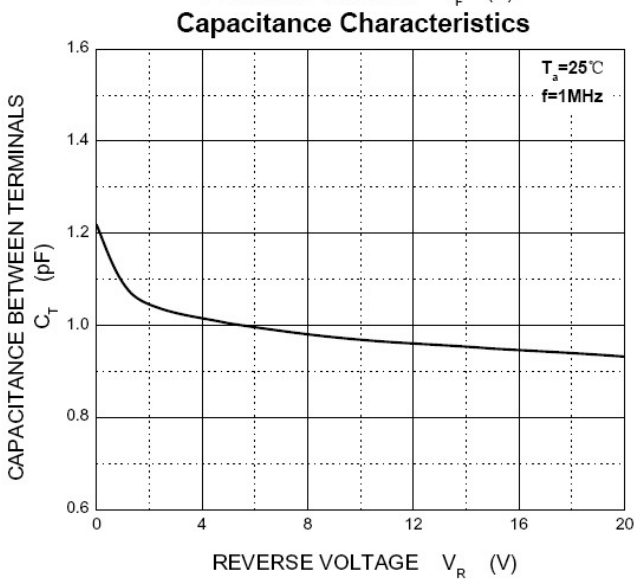
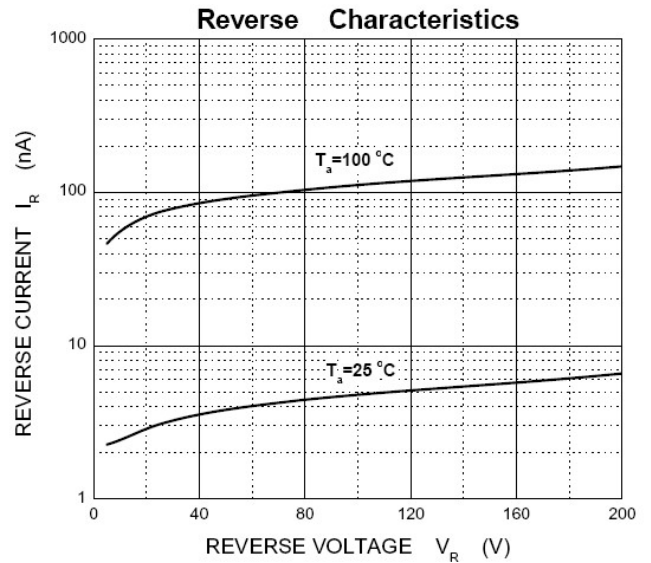
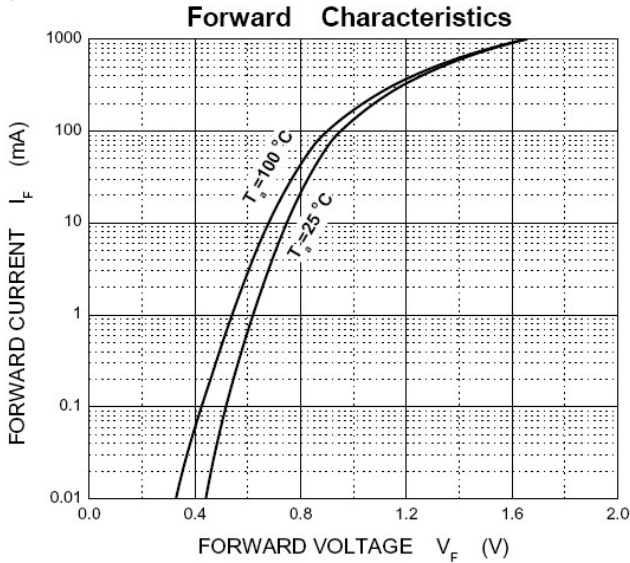
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	$V_R$	250	V
反向峰值电压 Peak Repetitive Reverse Voltage	$V_{RRM}$	250	V
功率消耗 Power Dissipation	$P_d$	225	mW
连续正向电流 Forward continuous Current	$I_{FM}$	400	mA
正向浪涌电流 Repetitive peak forward surge current	$I_{FRM}$	625	mA
正向(不重复)浪涌电流 Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ ; $T_A=25^\circ\text{C}$	$I_{FSM}$	2.5	A
工作结温 Operating junction temperature	$T_j$	150	$^\circ\text{C}$
存储温度 Storage temperature range	$T_s$	-55-+150	$^\circ\text{C}$
热阻抗 Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	555	$^\circ\text{C/W}$

Valid provided that electrodes are kept at ambient temperature.

**电特性 Electrical Characteristics** (Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified).

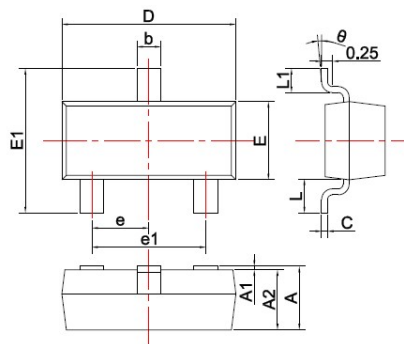
符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
<b>V(BR)</b>	反向电压 Reverse Voltage	$I_R=100\mu\text{A}$	250		V
<b>I<sub>R</sub></b>	反向漏电流 Reverse Leakage Current	$V_R=200\text{V}$	---	0.1	$\mu\text{A}$
<b>V<sub>F</sub></b>	正向电压 Forward Voltage	$I_F=100\text{mA}$	---	1.00	V
		$I_F=200\text{mA}$	---	1.25	
<b>TRR</b>	反向恢复时间 Reverse Recovery Time	$I_F= I_R=30\text{mA}$	---	50	nS
		$R_L=100\Omega$			
		$I_{RR}=0.1 \times I_R$			
<b>CT</b>	结电容 Capacitance	$V_R=0\text{V}$ , $f=1\text{MHZ}$	---	5	pF

**Typical Characteristics**



**SOT-23 PACKAGE OUTLINE**

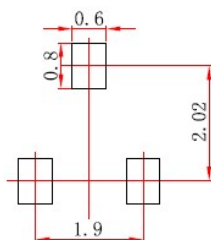
Plastic surface mounted package



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.