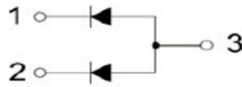
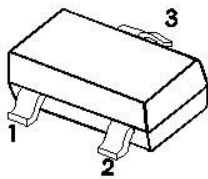


SOT-23 贴片塑封开关二极管

SOT-23 Plastic-Encapsulate Switching Diode

SOT-23



MARKING:JS2

特征 Features

- 开关速度小于 50nS; Fast Switching Device ($T_{rr} < 50\text{nS}$)
- 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
- Device meets MSL 1 requirements

极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)Maximum Ratings & Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

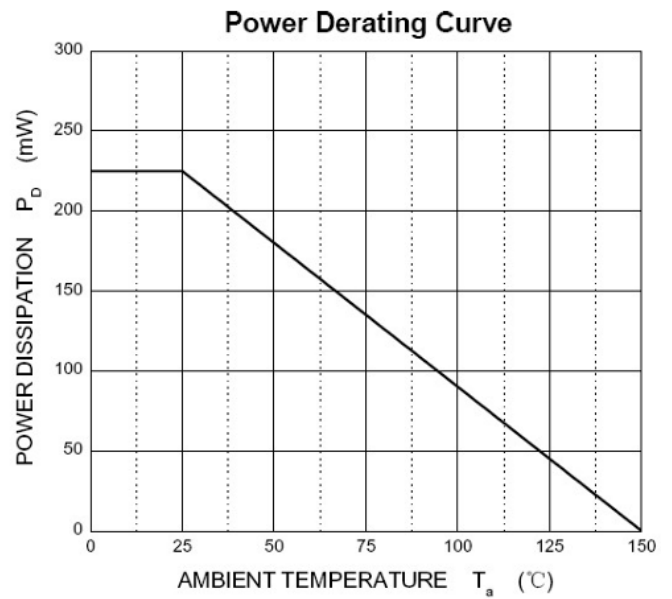
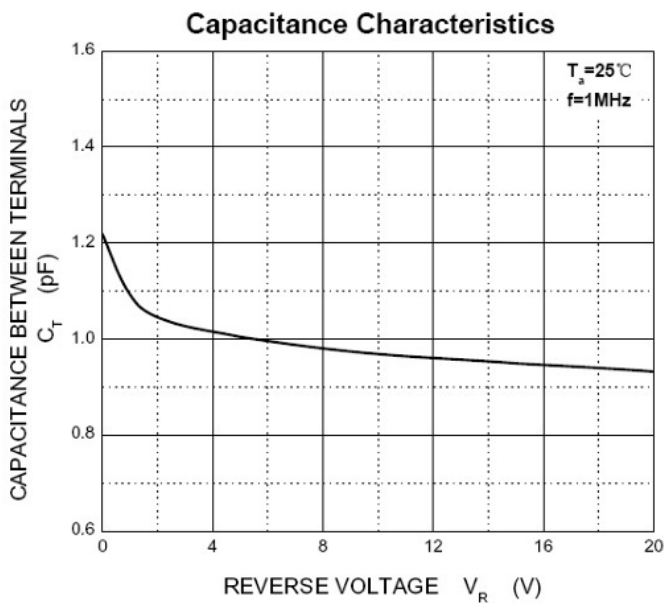
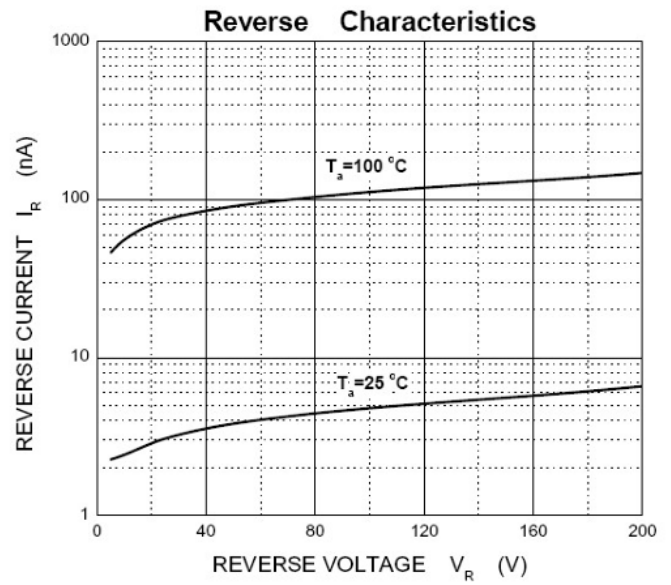
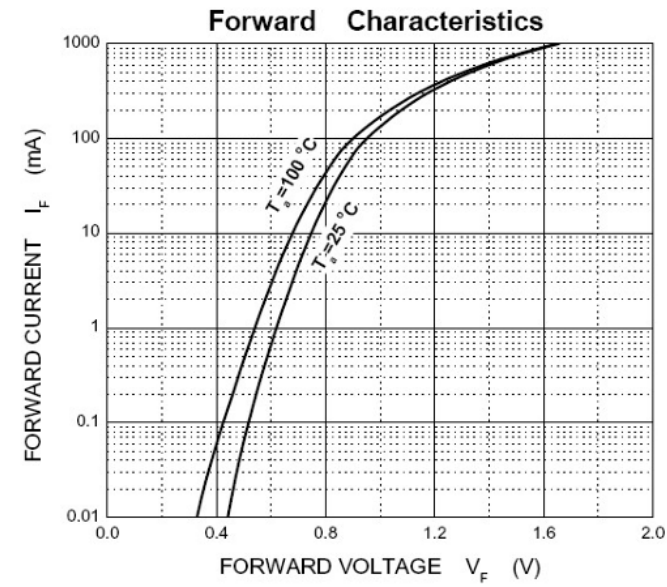
参数 Parameters	符号 Symbol	数值 Value	单位 Unit
反向电压 Reverse Voltage	V_R	250	V
反向峰值电压 Peak Repetitive Reverse Voltage	V_{RRM}	250	V
功率消耗 Power Dissipation	P_d	225	mW
工作结温 Operating junction temperature	T_j	150	$^\circ\text{C}$
存储温度 Storage temperature range	T_s	-55-+150	$^\circ\text{C}$
连续正向电流 Forward continuous 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 Peak Forward Surge Current @ $t_p=8.3\text{ms}$; $T_A=25^\circ\text{C}$	I_{FSM}	2.5	A
典型热阻 Typical thermal resistance	$R_{\theta JA}$	555	$^\circ\text{C/W}$

Valid provided that electrodes are kept at ambient temperature.

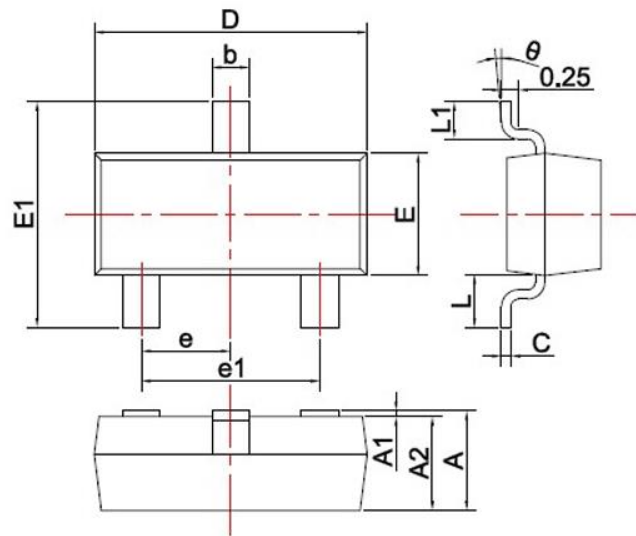
电特性 Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
V_{BR}	反向击穿电压 Reverse Voltage	$I_R=100\mu\text{A}$	250	---	V
I_R	反向漏电流 Reverse Leakage Current	$V_R=200\text{V}$	---	0.1	μA
V_F	正向电压 Forward Voltage	$I_F=100\text{mA}$	---	1.0	V
		$I_F=200\text{mA}$	---	1.25	
T_{rr}	反向恢复时间 Reverse Recovery Time	$I_F=I_R=30\text{mA}, R_L=100\Omega$ $I_{RR}=0.1 \times I_R$	---	50	nS
C_T	结电容 Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	---	5	pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



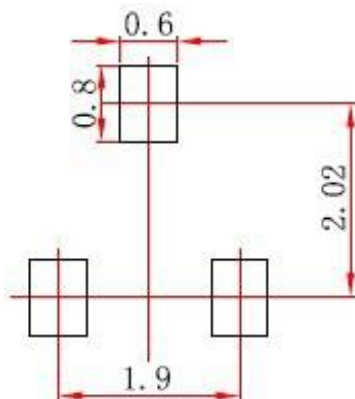
SOT-23 Package Outline Drawing



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
θ	0°	8°

Unit: mm

Suggested Land Pattern

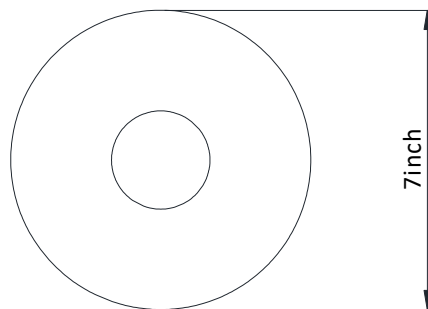


Note:

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

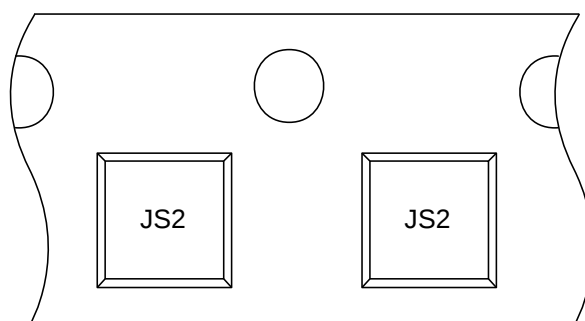
Part Number	Shipping	Reel Size
BAS21A	3000/Tape &Reel	7 inch

Reel Dimensions



Technical drawing of a rectangular plate with the following dimensions and features:

- Overall width: 8.00 ± 0.10
- Overall height: 1.75 ± 0.10
- Top edge features:
 - Two circular holes with a diameter of $\Phi 1.50 \pm 0.10$.
 - Two rectangular holes with a width of 4.00 ± 0.10 and a height of 3.50 ± 0.10 .
- Bottom edge features:
 - Two circular holes with a diameter of $\Phi 1.50 \pm 0.10$.
 - Two rectangular holes with a width of 4.00 ± 0.10 and a height of 3.50 ± 0.10 .
- Internal features:
 - Two circular holes with a diameter of $\Phi 1.50 \pm 0.10$.
 - Two rectangular holes with a width of 4.00 ± 0.10 and a height of 3.50 ± 0.10 .



User Direction of Feed

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