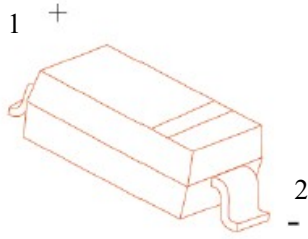


**SOD-123**

**500mW SOD-123 Fast Switching Diode**



MARKING: BAV19W: A8  
BAV20W: T2  
BAV21W: T3

**特征 Features**

- 开关速度小于 50nS; Fast Switching Device (TRR <50nS)
- 最大功率耗散 500mW; Power Dissipation of 500mW
- 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: SOD-123 封装 SOD-123 Small Outline Plastic Package
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 环氧树脂 UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any

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.)

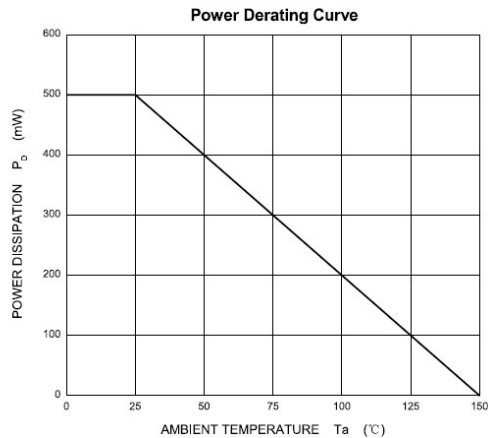
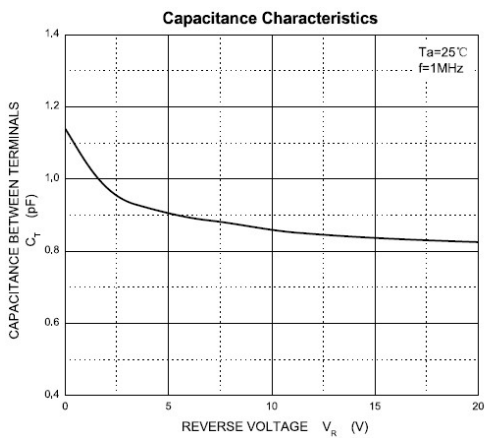
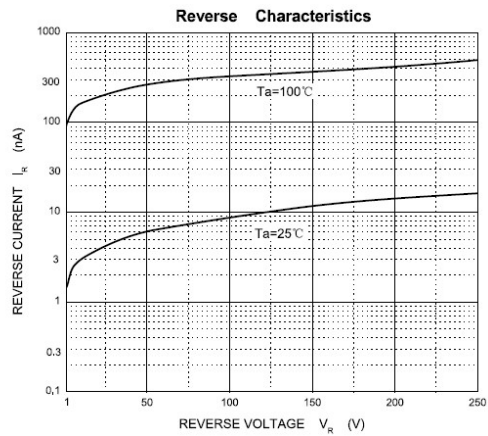
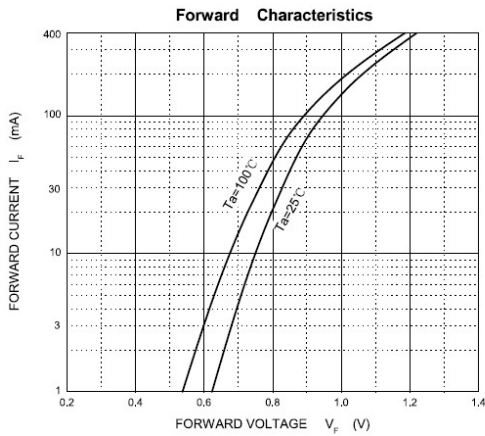
参数 Parameters	符号 Symbol	数值 Value			单位 Unit
		BAV19W	BAV20W	BAV21W	
Non- Repetitive peak Reverse Voltage	VRM	120	200	250	V
Peak Repetitive Peak Reverse Voltage	VRRM	100	150	250	V
Working Peak Reverse Voltage	VRWM				
DC Blocking Voltage	VR				
RMS Reverse Voltage	VR(RMS)	71	106	141	V
Power Dissipation	Pd	500			mW
Operating junction temperature	Tj	150			℃
Storage temperature range	Ts	-65-+150			℃
Thermal Resistance from Junction to Ambient	RθJA	250			℃/W
Average Rectified Output Current	IO	200			mA
Forward Continuous Current	IFM	400			mA
Peak Forward Surge Current TA=25℃ @tp=1.0ms; @tp=1.0s;	IFSM	2.5 0.5			A

Valid provided that electrodes are kept at ambient temperature.

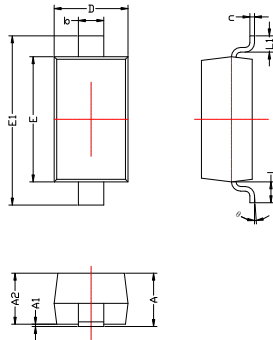
**电特性 Electrical Characteristics** (Ratings at 25℃ ambient temperature unless otherwise specified).

符号 Symbols	参数 Parameter	测试条件 Test Condition	界限 Limits		单位 Unit
			Min	Max	
VRB	反向击穿电压 Reverse Voltage	IB=100uA BAV19W BAV20W BAV21W	120 200 250	---	V
IR	反向漏电流 Reverse Leakage Current	VR=100V BAV19W VR=150V BAV20W VR=200V BAV21W	---	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= 30mA, IR=30mA RL=100Ω IRR=3mA	---	50	nS
C	结电容 Capacitance	VR=0V, f=1MHZ	---	5	pF

**Typical Characteristics**



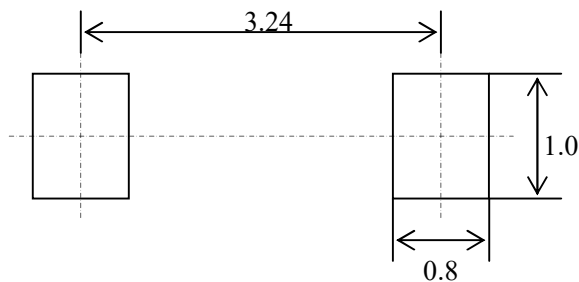
**SOD-123 PACKAGE OUTLINE** Plastic surface mounted package



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
$\theta$	0 $^\circ$	8 $^\circ$

**焊盘设计参考** Precautions: PCB Design

Recommended land dimensions for SOD-123 diode. Electrode patterns for PCBs



中心距: 3.24  
脚宽: 0.55  
焊盘宽: 1.00  
脚长: 0.50  
焊盘长: 0.80

技术要求:

- 1, 塑封体尺寸: 2.70 X 1.60
- 2, 未注公差为:  $\pm 0.05$
- 3, 所有单位: mm