描述 / Descriptions

SOD-123 塑封封装 硅半导体二极管。

Silicon Diode in a SOD-123 Plastic Package.

特征 / Features

开关速度快。

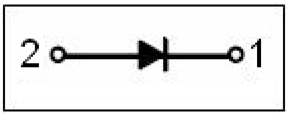
Fast switching diodes.

用途 / Applications

用于小信号处理.。

Small signal diode.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning

PIN1:Cathode PIN2:Anode

放大及印章代码 / h_{FE} Classifications & Marking

Model	BAV19W	BAV20W	BAV21W
Marking	HA8	HT2	HT3

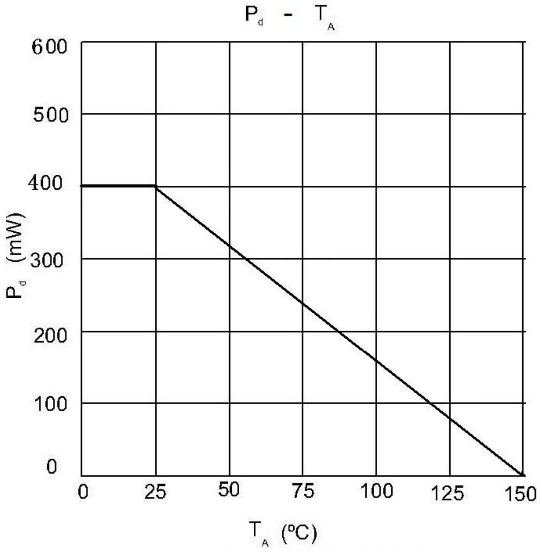
极限参数 / Absolute Maximum Ratings(Ta=25℃)

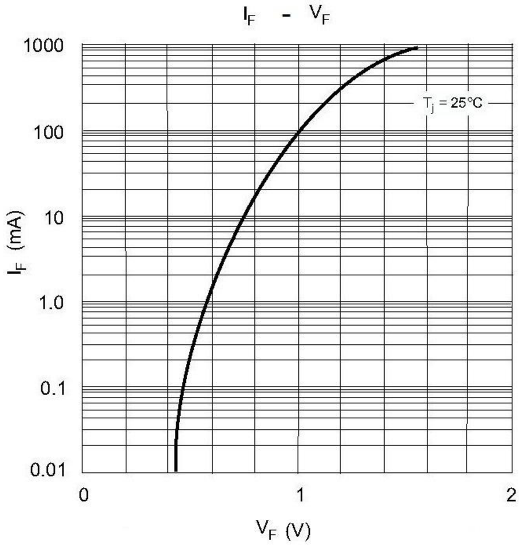
参数 Parameter	符号 Symbol	数值 Rating			单位 Unit
		BAV19W	BAV20W	BAV21W	
Peak Repetitive Reverse Voltage	V_{RRM}	120	200	250	V
Working Peak Reverse Voltage DC Reverse Voltage	V_{RWM}, V_R	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Non-Repetitive Peak Forward Current	I_{FM}	400			mA
Output Current	I_O	200			mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	t=1.0μs:2.5A t=1.0s:0.5A			A
Power Dissipation	P_d	400			mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			℃/W
Junction and Storage Temperature Range	T_J,T_{stg}	-65℃ TO +150℃			℃

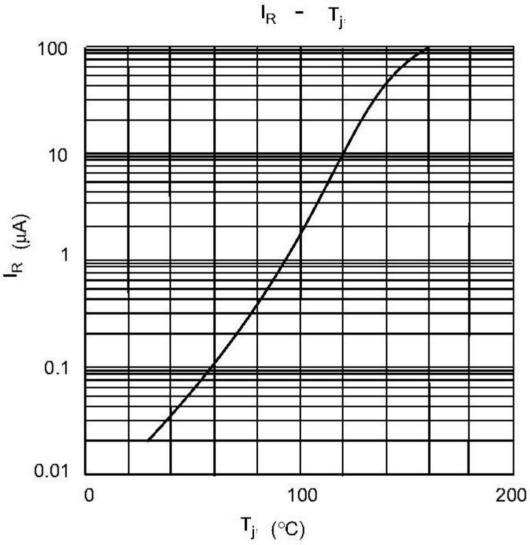
电性能参数 / Electrical Characteristics(Ta=25℃)

参数 Parameter	符号 Symbol	测试条件 Test Conditions		数值 Rating		单位 Unit
				MIN	MAX	
Reverse Breakdown Voltage	$V_{(BR)}$	I_R=100uA	BAV19W	120		V
			BAV20W	200		
			BAV21W	250		
Peak Forward Voltage	V_{FM}	I_F=100mA			1.0	V
		I_F=200mA			1.25	
Instantaneous Reverse Current	I_{RM}	T_j=25℃	V_R=V_{RWM}		100	nA
		T_j=100℃	V_R=V_{RWM}		15	uA
Reverse Recovery Time	t_{rr}	I_F=I_R=30mA, I_{rr}=0.1xI_R	R_l=100Ω		50	ns
Total Capacitance	C_T	V_R=0 f=1.0MHz			5.0	pF

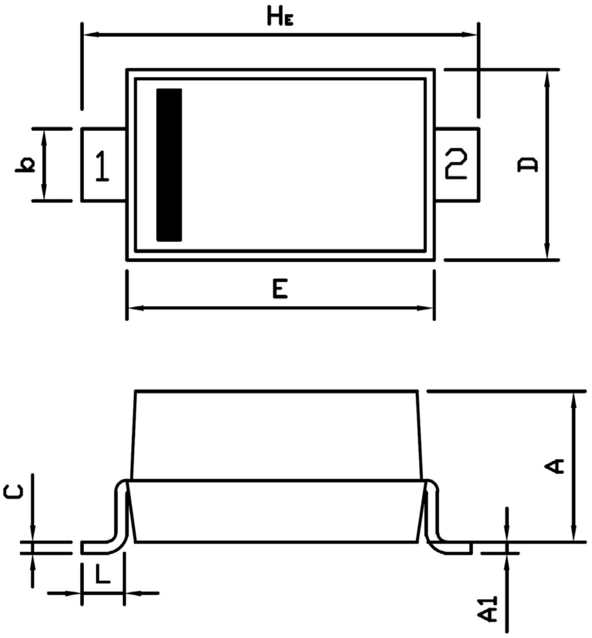
电参数曲线图 / Electrical Characteristic Curve







外形尺寸图 / Package Dimensions



Unit: mm

尺寸 符号	SOD-123	
	min	max
A	0.95	1.35
A1	0.01	0.10
b	0.45	0.65
C	0.09	0.12
D	1.50	1.70
E	2.55	2.75
HE	3.45	3.85
L	0.20	0.40

PIN: 1.CATHODE 2.ANODE

SOD-123

印章说明 / Marking Instructions

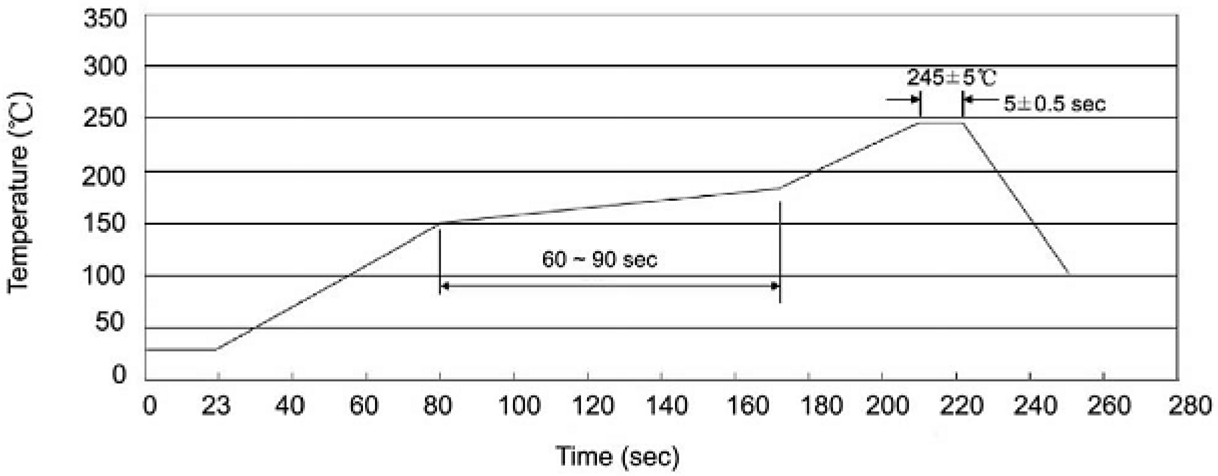
说明：

H：	为公司代码
A8：	为型号代码

Note:

H:	Company Code.
A8:	Product Type.

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：	Note:
1、预热温度 25～150℃，时间 60～90sec;	1.Preheating:25~150℃, Time:60~90sec.
2、峰值温度 245±5℃，时间持续为 5±0.5sec;	2.Peak Temp.:245±5℃, Duration:5±0.5sec.
3、焊接制程冷却速度为 2～10℃/sec.	3. Cooling Speed: 2~10℃/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5℃　　时间：10±1 sec.　　Temp.:260±5℃　　Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SOD-123	3,000	10	30,000	8	240,000	7″ ×8	180×120×180	385×257×392

使用说明 / Notices