

BAT42W-BAT43W

Rev.G Apr.-2018

描述 / Descriptions

SOD-123 塑封封装 肖特基二极管。

Schottky Diode in a SOD-123 Plastic Package.

特征 / Features

低正向压降, 快速切换时间。无卤产品。

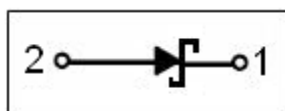
Low Forward Voltage Drop, Fast Switching Time. HF Product.

用途 / Applications

肖特基二极管。

Schottky 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	BAT42W	BAT43W
Marking	HS7	HS8

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

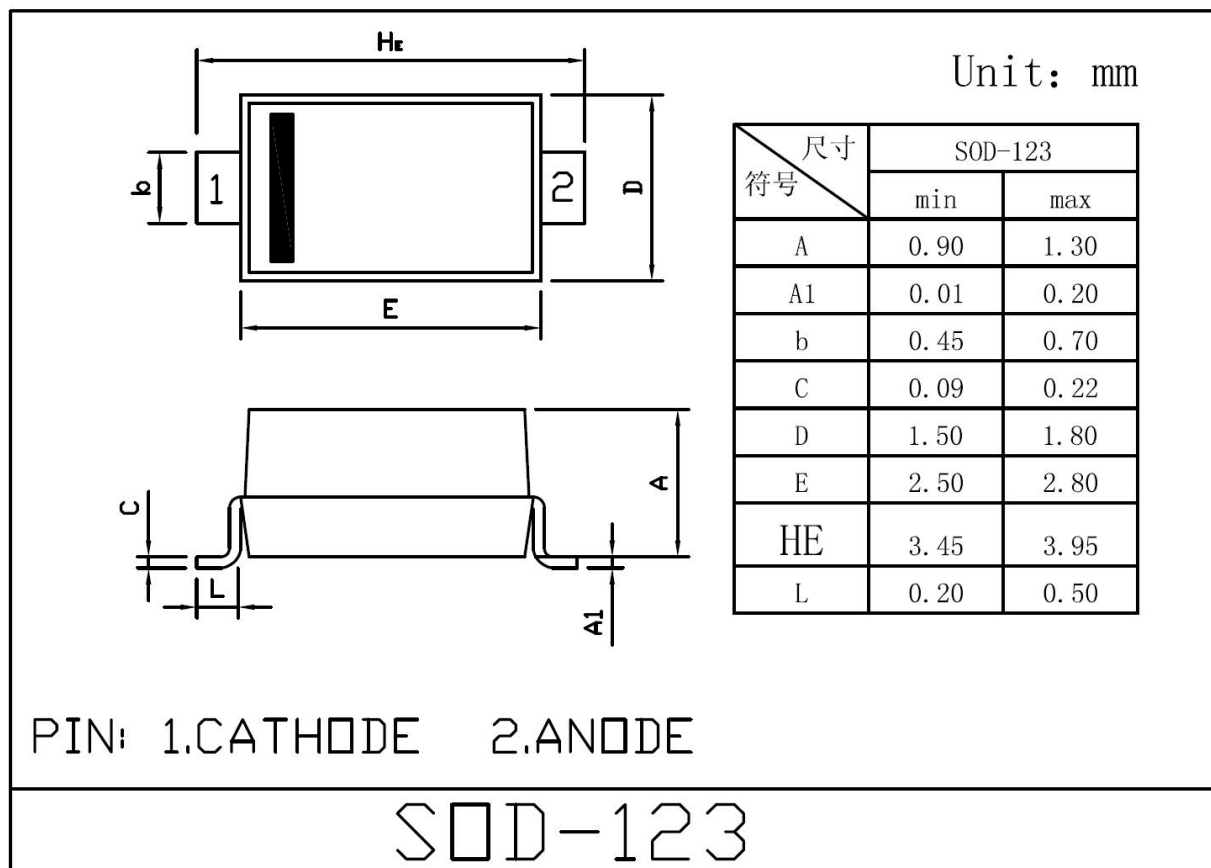
参数 Parameter	符号 Symbol	数值 Rating		单位 Unit
		BAT42W	BAT43W	
Peak Repetitive Reverse Voltage ,Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	30		V
RMS Reverse Voltage	$V_{R(RMS)}$	21		V
Non-Repetitive Peak Forward Current	I_{FM}	200		mA
Non-Repetitive Peak Forward Surge Current	I_{FRM}	500		mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4.0		A
Power Dissipation	P_D	200		mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500		°C/W
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to 125		°C

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

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating		单位 Unit
			BAT42W/BAT43W		
			MIN	MAX	
Forward Voltage	V _{(BR)R}	I _R =100μA	30		V
Peak Forward Voltage	V _{FM}	I _F =2.0mA	0.26	0.33	V
		I _F =10mA		0.40	
		I _F =15mA		0.45	
		I _F =50mA		0.65	
		I _F =200mA		1.0	
Instantaneous Reverse Current	I _{RM}	V _R =25V		500	nA
		V _R =25V T _J =100℃		100	μA
Total Capacitance	C _T	V _R =1.0V, f=1.0MHZ		10	pF
Reverse Recovery Time	t _{rr}	I _F =I _R =10mA I _{rr} =0.1 x I _R , R _L =100Ω		5.0	ns



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



说明：

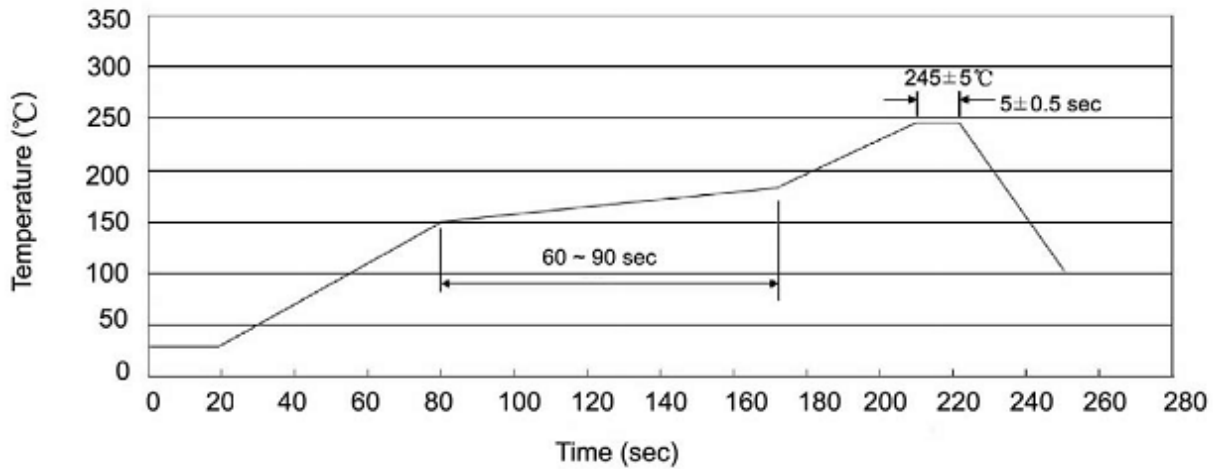
H： 为公司代码

S7： 为型号代码

Note:

H: Company Code.

S7: Product Type.

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


说明：

- 1、预热温度 150 ~ 180°C，时间 60 ~ 90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2 ~ 10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

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	6	180,000	7" ×8	180×120×180	390×385×205

使用说明 / Notices