

描述 / Descriptions

SOD-123 塑封封装 肖特基二极管。
Schottky Diode in a SOD-123 Plastic Package.

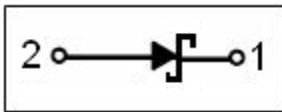
特征 / Features

金属硅结，多数载流子传导。过电压保护装置。低功耗，高效率。大电压能力。低正向电压降。高浪涌能力。用于低压，高频逆变器。自由转动和极性保护应用。无卤产品。
Metal silicon junction, majority carrier conduction. Guarding for overvoltage protection. Low power loss, high efficiency. High current capability. low forward voltage drop. High surge capability. For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications. HF Product.

用途 / Applications

一般用途。
General purpose.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1:Cathode PIN2:Anode

印章代码 / Marking

Type number	Marking code
BAT54W	L4

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

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Maximum Average Forward Current	I_O	0.2	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	13	A
Typical Thermal Resistance	$R_{\theta JA}$	435	°C/W
Typical Junction Capacitance at VR=0V, f=1MHz	C_j	60	pF
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
			Min	Typ	Max	
Maximum Instantaneous Forward Voltage	V_F	$I_F=0.001A$			0.32	V
		$I_F=0.1A$			1.0	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$V_R=25V$			2.0	μA

NOTES:(1)P.C.B. mounted with 5*5mm copper pad areas.

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

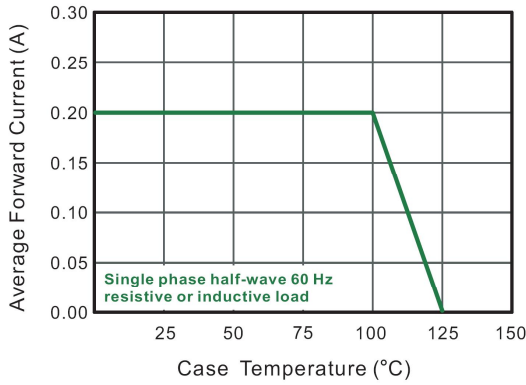


Fig.2 Typical Reverse Characteristics

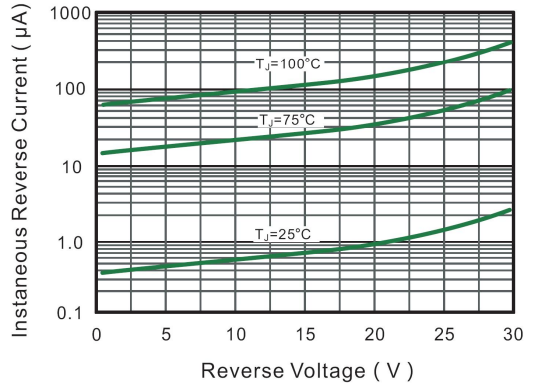


Fig.4 Typical Forward Characteristics

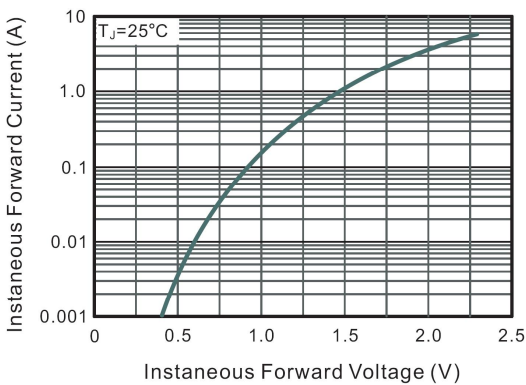


Fig.4 Typical Junction Capacitance

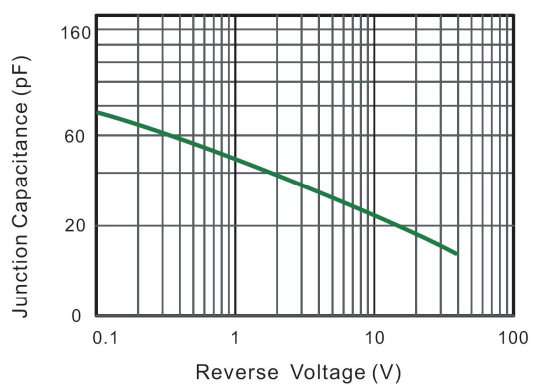


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

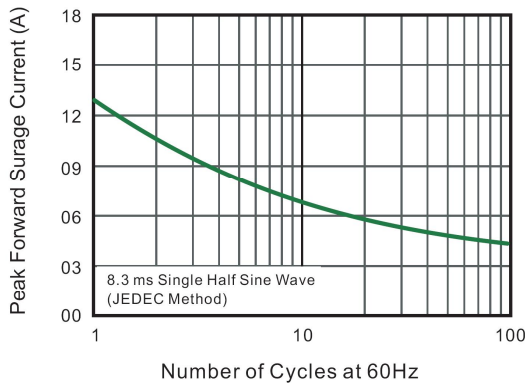
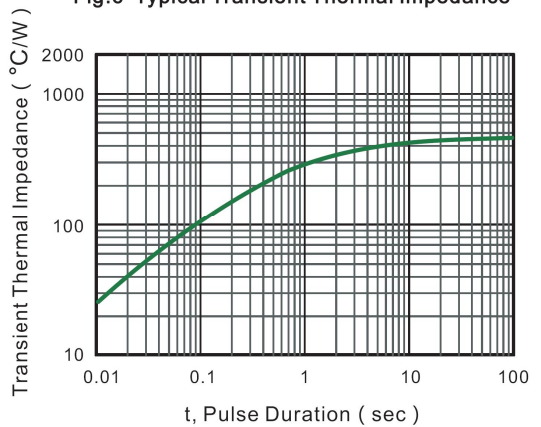
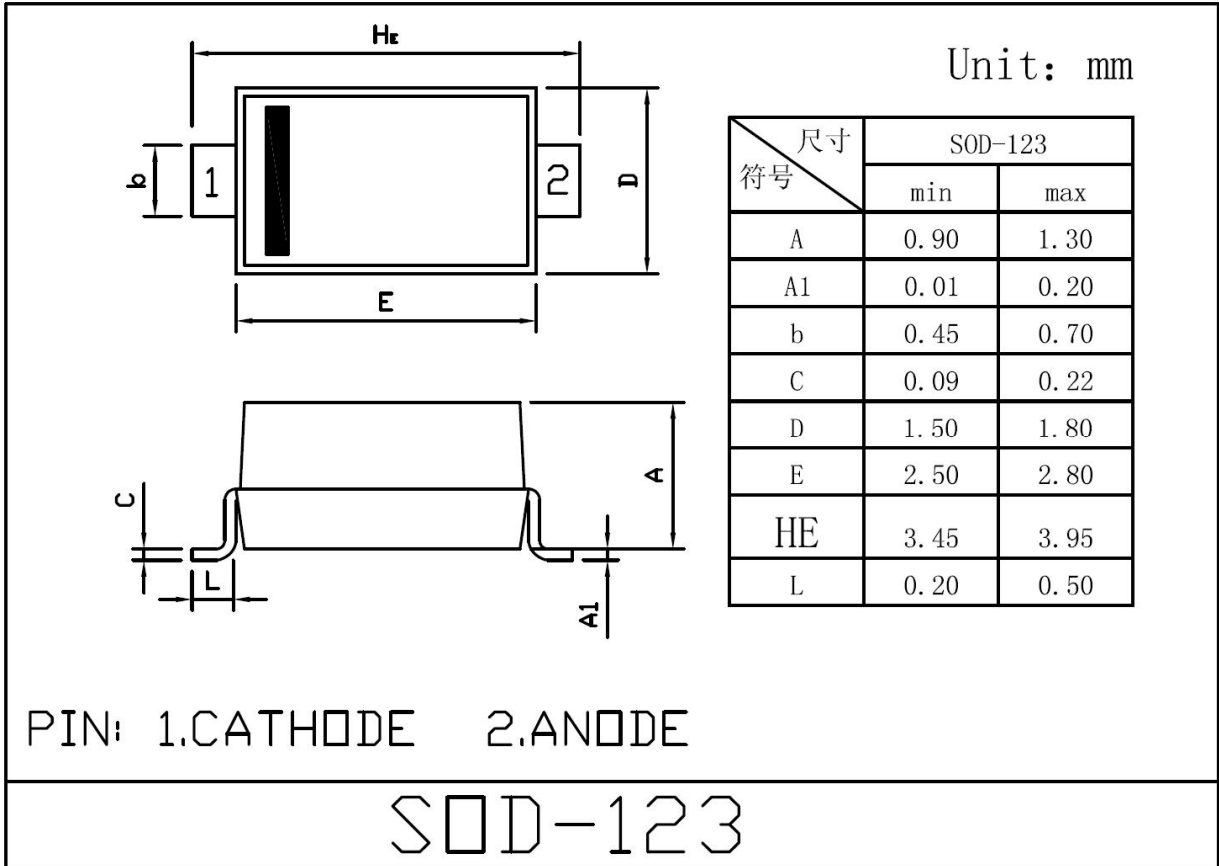


Fig.6 Typical Transient Thermal Impedance



外形尺寸图 / Package Dimensions



印章说明 / Marking Instructions



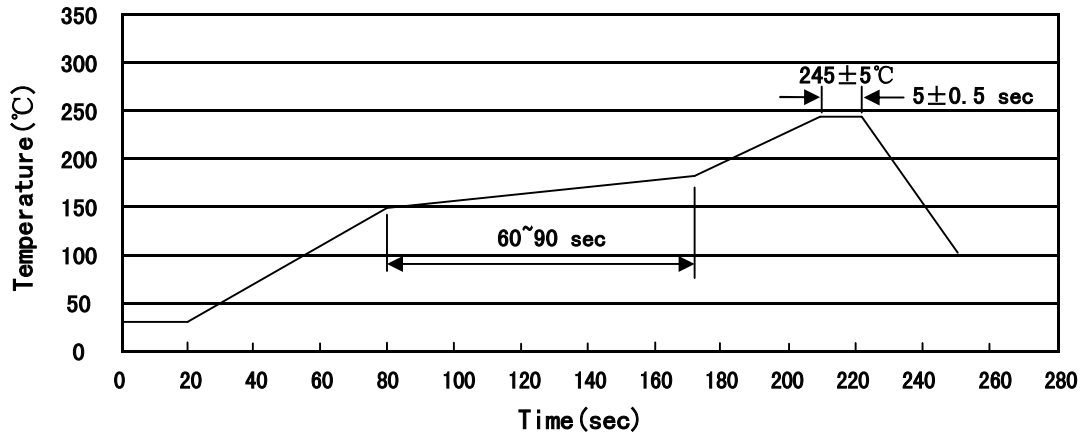
说明：

L4： 为型号代码

Note:

L4： 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